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"Nonformal Education: A Remedy for Educational and Development Crisis in Third World countries?"

by

© Afroz Zaheeruddin

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH

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The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research, for acceptance, a thesis entitled "Nonformal Education: A Remedy for Educational and Development Crisis in The Third World Countries?" submitted by Afroz Zaheeruddin in partial fulfilment of the requirements for the degree of Master of Education in Comparative and International Education.

ABSTRACT

Education in Third World countries was conceived as an indispensable component for national development. Therefore, since the Second World War, rapid expansion in student enrolments at all levels of education took place at leaps and bounds. In spite of the rapid expansion, achievement of universal primary education is far from a reality and illiteracy is still high. Most Third World countries have almost reached a financial breakpoint as far as educational resource allocation is concerned, and they have neither the financial nor the human resources to meet the rising demand for education. Moreover, the products of the formal education system are frequently not congruent with the human resource needs of the Third World countries. Rapid expansion has not only brought drastic fall in the quality of education increasing high rates of dropouts and repetition resulting in the wastage of scarce resources, but has also fuelled rural-urban migration and urban unemployment. All these problems which characterize most Third World countries constitute what Phillip Coombs called "educational crisis".

The educational crisis has stemmed from the crisis in development. Relating development to the narrow concept of a materialistic and urban oriented economy, development strategies were focussed on rapid industrialization often at the expense of agriculture and rural developmemt. Investment in education especially at the secondary and tertiary levels was therefore conceived as essential to produce middle and

high level manpower to accelerate economic growth in the small urban modern sector. The assumption was that if economic development measured in terms of Gross National Product, is taken care of, poverty will take care of itself, unemployment will be eliminated and income will be redistributed. But the fact is that although the development policy enabled an increase in the economy; it failed to end poverty, eliminate unemployment and redistribute income adequately. These problems constitute "development crisis".

Expansion of educational oportutnities that claimed to accelerate economic growth, to raise standards of living especially of the poor, to generate employment opportunities for all and to bridge the gap between the modern and traditional sectors and between the rich and poor, seemed to be an exaggeration on the part of formal education. The crisis has intensified in most Third World countries which are experiencing serious stress from resource constraints, disparities in the development of modern and traditional sectors of economy, increasing unemployment and underemployment, decline in real wages, growing inequalities in income and educational opportunities and rapidly increasing numbers below the poverty line. Since formal education alone cannot solve all the problems and enable the achievement of wider development goals, nonformal education, an alternative strategy, which is usually less expensive and more effective is advocated as a viable measure to fill in the void created by formal education. This strategy would

contribute both to the individual and national development overcoming some of the education and development crisis that most Third World countries are facing.

This thesis first attempts to provide an in depth study of the education and development crisis in the Third World countries concentrating on their causes and consequences. In the light of the crises, a rationale is developed for nonformal education that is supportive of the new concepts of development. Secondly, three case studies of nonformal education in three countries of differing socio-political framework - China, Tanzania and Botswana - illustrate to show that in theory and as well in practice, nonformal education in its multitude of variation, has proved to be a viable system of educational delivery. Its operations are more appropriate in terms of effecting relevant awareness of skills, knowledge and attitudes to the people at a relatively low cost and with no elaborate permanent establishment. Nonformal education can support and further a more equitable development, but the degree of its success depends upon the socio-political structure of the country. Nonformal education can be more successful when it operates in a society that has already undertaken major structural changes or motivated towards them. If a society is neither committed nor motivated to such structural changes, then it will continue to be marginally accepted by the masses who deem it as a "second rate education". The main reason is the socio-economic rewards that nonformal education offers which

are often less than that are offered by the formal system of education.

The low socio-economic benefits accruing from nonformal education impose a severe limitation. Until positive steps are taken to overcome the limitations, the logical solution for most Third World countries is to develop nonformal education as a sytem parallel to formal education. With the continued expansion (gradual) of formal education, Third World countries must strenghten the existing nonformal education and at the same time make provision for it to be a 'supplement', 'complement' and an 'alternative' to formal education wherever necessary, exploring the areas for expansion where the demand is likely to be more and resistance is less.

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1. INTRODUCTION

Schools as 'institutions' and formal education as "channel of knowledge and skills" are of recent origin in the history of mankind. Learning of skills required for survival is as old as the emergence of homosapiens. With the development of civilization learning of skills acquired family and group characterstics, but when work became specialized and division of labour became pronounced, knowledge and skills began to increase. It became necessary not only to preserve the increased knowledge and skills, but also to promote and disseminate them. For the functions of preservation, promotion and dissemination of knowledge and skills, special institutions called 'schools' were created and special groups of people designated as 'teachers' became responsible. Initially, the amount of knowledge that was preserved and had to be disseminated was limited and the major agencies involved were religious bodies supported by voluntary efforts.

However, compared with non-industrialized nations,[1] the schooling system in western societies[2] grew rapidly and was finally taken over by the State. Several reasons have been identified as contributing to the growth of educational system in western societies. Industrialization shifted

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[1] The terms 'non-industrialized', 'less developed', 'emergent', 'developing', 'underdeveloped', use for Third World countries will be used interchangeably in the thesis.

[2] Western societies refer to the developed nations, hence the terms 'industrialized', 'technically advanced', 'developed' and 'metropolitan nations' will be used interchangeably.

productive work from family to factory and demanded parents' labour. This removed the children from their family environment for a greater part of the day and resulted in the need for alternative supervision. Hence, it was necessary to create schools not only to look after the children, but also to prevent them from committing crime or getting into mischief, and also to provide them with the necessary moral education which they were lacking through their parents' long absence from home.[3]

Large-scale employment of uneducated or rather unlettered workers in the mills, workshops, factories and industrial and commercial establishments also posed certain important problems. Workers' education became a felt need not only for protecting the worker's own rights and interests (this was achieved because of the concern of unions), but also for ensuring industrial efficiency and stepping up production. Later on, when the industrial society needed certain types of individuals with given knowledge, skills and values, it was essential to create institutions to prepare individuals with such skills. So schools became important 'basic institutions' of society which began to grow under the authority of State consuming increased resources and increasingly taking over the role of manpower preparation for the new industrial order. A fair

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[3] Robert Raikes was the first man to recognize the need for educating the children of factory workers of the pin industry at Gloucester in England, and so started the "sunday school" movement in 1780.

proportion of the outputs produced by schools was absorbed by the educational system itself as it expanded to meet the growing demand for education. Formal education thus became increasingly indispensable for a greater number of individuals and for the society as a whole. Gradually, the educational system in economically more developed societies achieved great significance, size and status.

At the end of the Second World War, industrialized nations had developed a large-scale system of formal education for all children. Most of these societies were able to provide free primary and secondary education for every child. Provision was also increased for higher education because it was believed that the expansion of the system at this level was fully justified as a good investment. Hence, the educational expenditures of the industrialized countries increased. Similar educational policies were advocated for the emerging countries of the Third World.

1.1 Background To The Problem

In the post-war period, most of the colonised territories in Asia and Africa won their political independence, formally putting an end to the colonial era. An important feature of the post colonial period was the increasing acceptance of an idea of equality of men and countries. The General Assembly of the United Nations in

1948 adopted and proclaimed the 'Basic Rights' of man in the hope of promoting peaceful co-existence of all people, but it soon realised that harmony, equity and justice cannot be achieved if great inequalities in economic development were allowed to persist. Therefore, the first priority was to bridge the gulf separating the miniority of rich nations[4] and the majority of poor countries,[5] which comprised of two thirds of humanity living in servile poverty, ignorance and disease.

The production of scientific and technological discoveries, the development of Keynesian economic theories, and the growth of economies and prosperity in the west led to an illusion that a remedy for the evils in the world had been found. A cure had been invented which would solve all the problems of poor nations. In the light of such an illusion, President Truman's Point Four seemed delightful when he announced:

> ...... we must embark on a bold new programme for making the benefits of our scientific advances and industrial progress available for the improvement and growth of underdeveloped areas. More than half the people of the world are living in conditions approaching misery. Their food is inadequate. They are victims of disease. Their economic life is primitive and stagnant. Their poverty is a handicap and a threat both to them and to more prosperous areas. For the first time in history, humanity possesses the knowledge and the skill to relieve the

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[4] Western industrialized nations, the so called developed and metropolitan countries are the rich nations

[5] The poor nations are the ex-colonies, which though politically independent, were economically dominated by their metropole countries. These poor nations are now known as the Third World, underdeveloped, less developed or developing countries.

suffering.[6]

The only solution to the problems of underdevelopment among poor nations was to enable them to accelerate their economic growth. There was much discussion on how the phase of "economic take off" to use Rostow's terminology[7] could be reached; and whether the developing countries could somehow take short cuts to 'catch up' with the technically advanced countries.

Physical capital which could accelerate development was found to be a missing factor in the Third World. Capital that was granted to Europe under the Marshall Plan and capital given to Japan to restore its devastated industries, proved productive. With such success, it seemed to many policy makers that a similar infusion of physical capital in the developing countries would also yield similar results. But no such development resulted when the U.S. aid was given to Indonesia and Burma. The dominant explanation given for differential results was that Western Europe possessed

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[6] Quoted in Alan B. Mountjoy: Developing the Underdeveloped Countries. London: Macmillan, 1971, p.9.

[7] See W.W. Rostow: The Stages of Economic Growth: A Non-Communist Manifesto. London: Cambridge University Press, 1960. Rostow divides the stages of development into five stages - (a)preindustrial or traditional, (b)transitional, (c)the "take off", (d)drive to maturity and (e)the high mass consumption period. Rostow argues that development process does not inevitably generate crisis and misery. On the contrary, in the final stages of development, high mass consumption assures the masses a very comfortable material life. The key to the realization of development is simply a set of social circumstances which allows a continual large net investment accompanied by approximate rationality on the part of investors. To Rostow, the high mass consumption society seemingly transforms nearly all of the features that characterize a typical underdeveloped society.

trained and educated human resources: the basic technological capacities and the manpower with modern values necessary to complement the physical capital effectively. Such capacities were absent in the Third World, and so, these economies were unable to utilize effectively the physical capital available to them.[8]

In view of such an explanation, it was suggested that continued economic growth would be primarily dependent upon highly trained manpower, rather than on mere traditional economic inputs of ordinary labour and physical capital. Given this interpretation, it was argued that continued increase in economic growth could best be achieved by focussing public investment in higher educational expansion. Most economists demonstrated the importance of education and estimated its contribution to the economic growth by various forms of calculations such as the 'social rate of return'.[9] Expenditure in education came to be regarded as an investment in mankind with returns on education both, social and private to be at least as high as those of physcial capital.

In support of this concept, an American economist, Theodore Schultz, postulated the theory of 'human capital'

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[8] Irvin Sobel: "The Human Capital Revolution in Economic Development: Its Current History and Status". Comparative Education Review, June 1978, No. 2, p.280.

[9] Independent work of Theodore W. Schultz (1961) and F. Dennison (1964) in the 20th century shed light on how important education is in bringing about economic growth. Using different approaches they estimated that about 20% of the growth rate over the period 1929-1957 was due to increases in educational level of the labor force.

that shifted the traditional concept of economic growth related to accumalation of physical capital to economic growth related to human capital formation - both for individual and national development.[10] Harbison and Myers[11] and others, early in the 1960s, identified the importance of education to the economy as being chiefly through the provision of trained and especially high level manpower.

Human capital theorists through the late 1950s and early 1960s succeeded in convincing the government, educators and public alike about the validity of their prescription, and this approach was enthusiastically received both in developed and less developed countries. Regardless of the country or nature of its educational systems, the end result was to improve access to educational system at all levels. Human capital theory not only promised high level of national success through educational expansion, but also high levels of individual upward mobility without any threat of downward mobility to the already privileged group. Thus a more egalitarian society would be produced. Third World countries were convinced that the wealth, prosperity and power of the industrialized countries could be attained by replicating the formal education system of these countries. Therefore, with this faith in human capital theory, developing countries in order

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[10] See T. Schultz: "Investment in Human Capital". American Economic Review, 51, 1961.

[11] Frederick H. Harbison and C.A. Myers: Education, Manpower and Economic Growth. New York: McGraw Hill, 1964.

to achieve economic growth, began to build up their formal system of education on western model as a matter of highest priority.

Expansion of education system in developing countries became indispensable not only to achieve rapid economic growth of the country, but also for other reasons. To run a modern nation without any continued dependence on foreign expertise, an adequate supply of a whole range of professional expertise at all levels was required. These requirements for the emergent nations were worked out using the techniques of manpower planning. The Report of Ashby Committee showed the value of manpower planning and how the systems of higher education could be developed to meet the requirements of trained personnel for economic growth and for national self-reliance. It even proposed that this development should be accelerated by short term importing of teachers and other trained experts in key positions of expansion.[12]

The other reason was humanitarian. The General Assembly of the United Nations agreed that every one had the right to education (Article 26 of the Universal Declaration of Human Rights) and this right, like other rights was to be recognized without discrimination in terms of race, religion and sex. So in the early 1960s members of Unesco organized three conferences. In the Karachi Conference, delegates from

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[12] See Investment in Education. Report of Ashby Commission, Federal Ministry of Education, Lagos 1960.

Asian countries devised a plan to provide universal, complulsory and free primary education for the minimum length of seven years prior to 1980. In the Addis Ababa Conference for African member countries, recommendation was made to introduce universal, compulsory and free primary education of six years before 1980 and the Conference at Santiago de Chile for Latin American member countries demanded that all countries in this region provide universal, compulsory and free primary education of six years by 1970.[13] All these three conferences set a target date of 1980 as the latest to universalize primary education to meet the manpower needs and also enable the elimination of illiteracy[14] in Third World countries. One result of these conferences was an increased pressure on political leaders of Third World nations (from within and outside) to provide free universal primary education for all children. However, the initial enthusiasm for providing primary education was overtaken by the needs of secondary and higher levels of education for nation building and manpower training.

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[13] Ladislav Ceyrech: Problems of Education in Developing Countries. New York: Praeger Publications, 1967, pp.4-27.

[14] C. Anderson's data of cross-sectional analysis of England, United States and other countries support a generalization that 40% of adult literacy or primary enrollment is a threshold for economic development. All countries with less than 40% literacy were in the poorest income bracket - less than $300 per capita - while those with over 90% literacy were in the richest income bracket - more than $500 per capita". in C. Anderson: "Literacy and Schooling on the Threshold: Some Historical Cases" in C. Anderson & M.J. Bowman (ed) Education and Economic Development. 1965, p.347.

On the whole, within developing countries there were many formulations in government plans for the development of education, which D'Aeth maintains were usually couched in idealistic rather than practical terms and often expressing hopes such as following:[15]

1. That better education would overcome ignorance and so open the way for individuals to lead richer lives, to establish better social relationships within communities, and so enable the local communities to gain in self-respect and become more democratic and responsible, more able to take initiatives for their own improvement and to become outward looking.
2. That to improve education would contribute to economic growth, thus raising the general standard of living, and helping towards better employment opportunities, health, housing etc.
3. That education through the aid of literacy, would improve the quality of rural life, especially agricultural works and increase opporturnities for a richer cultural existence.
4. That it would improve the training in skills for the development of industries, and also modern social services, increasing the readiness of the recepients to learn new techniques required for innovation and change.
5. That it would be the most effective means of developing a more equitable society, with better opportunities for individuals in the countryside as well as in towns, with less extremes of poverty and affluence. It would also develop a cadre of responsible leaders and administrators. Hopefully such a society would have fewer tensions and frustrations, and so its members would be more satisfied and peaceful.
6. That education would contribute to nation building, by fostering a growing respect for each nation's own culture and traditions, and by aiding the development of political maturity, which would be capable of combining orderly leadership with freedom of thought and expression and respect for individual rights.

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[15] Richard D'Aeth: Education and Development in the Third World. England: Saxon House D.C. Heath Ltd., 1975, pp.9-10.

These views expressed in a variety of ways resulted in an optimism of the Third World political leaders about education and their efforts to develop ambitious plans for the expansion of their educational system. The inevitable worldwide expansion of the educational system made education a big industry in every nation involving about one fifth to one fourth of the total population, with an employment of one to two percent of labour force and consuming 5-6% of the national budget. In Third World countries, education is the largest industry and the greatest consumer of public revenues. For example, in Nigeria an annual compound growth rate of expenditure on education in the period 1960-1966 averaged about 15% as compared with an annual growth rate in Gross National Product (GNP) of about 4 percent.[16] Education system in Third World countries is now the largest employer of the outputs from secondary school and institutions of higher education.

Planned and unplanned educational changes in Third World countries resulted in increased educational enrolments and costs. Between 1950-1970 the aggregate increases in enrolments were 211%, 465% and 511% in the primary, secondary and tertiary levels respectively.[17] Educational expenditures also increased at a spectacular rate, leaving

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[16] F.H. Harbison: Human Resources as the Wealth of Nations, 1973, p.55.

[17] World Bank: Education Sector Working Paper. 1974, p.13.

little margin for growth in the 1970s.[18] The phenomenal universal growth of educational enrolments during the period 1950-70 is termed a "world educational revolution" by John Meyer and his associates[19] who applied a variety of models and theories to explain this phenomenon. They identified four features that contributed to this revolution:

1. the "pursuit" by all nations of national economic development goals, which require "rational planning and technically trained personnel"[20];

2. the "recognition" by political leaders that an educated citizenry was a valuable asset for the development of the nation;
3. the "insistence" in the contemporary world on "progress" and the wide spread confidence in education as a device for transforming individuals and society; and

4. the "equating" of "development" with economic success within a capitalist world economy, and the "pursuit" by national elites to use education as a means to achieve this end.[21]

The two decades (1950-70) of educational expansion can be described as the golden era of formal education that was accompanied by a feeling of optimism, especially in the developing world. However, at the end of 1960s and early 1970s skepticism and disillusionment concerning education had set in confronting the First World, the Second World and the Third World. Educators and social scientists became increasingly disillusioned with the potential of formal

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[18] Don Adams: "Education and Development". Comparative Education Review, 21:2 & 3, 1977, p.301.
[19] John W. Meyer et al.: "World Educational Revolution: 1950-70". Sociology of Education, 50: 1977, p.225.
[20] A. Waterston: "Development Planning: Lessons of Experience". Baltimore: John Hopkins Press, cited in John W. Meyer et al.: op. cit. p.225.
[21] J.W. Meyer et al.: op cit. p.225.

schooling which was previously seen as the panacea for social and individual development. Formal schooling came under severe criticism, attacked from several points of view. Social scientists who had often made tall claims concerning formal schools, soon began to pin point several limitations of schooling. The attacks were focussed on schools themselves: criticism was levied at the effect on students by the schools' authoritarian structure, the relationship of school with the society in legitimizing inequality and the education system as a whole. The criticism of formal schooling in developed countries was often made on quite different grounds than the criticisms about the developing countries.

1.2 Problem

The crisis in formal education was not due to the failure of schools to achieve goals that have always been accepted as the purpose of schooling. Rather it was the result of increased expectations of what schools should do against what in fact schools appeared to do that have intensified in the last couple of decades. Schools were predicted to be the panacea for social, political and economic problems, so increase in their numbers occurred. However, the resulting expansion after a decade or two, instead of solving the problems, further intensified them.

Underlying the contemporary sense of crises is a widespread perception that schools have failed to promote equality and equality of opportunity, to maximize the growth and development of each individual student, transmit cognitive skills to all children and create a more just and more humane society. The structure of schooling has not only inhibited economic growth, but also actively contributed to economic inequality. Instead of the benefits of growth from education spreading out evenly through out the economy, the rural areas where majority of the population lives began stagnating, and in many cases even falling further behind the poverty line. Formal education which was hoped to be the prime factor in the social and individual development had further reinforced social, economic and political inequalities. Instead of narrowing the gap between the rich and poor, the gap further widened not only between the rich and poor countries[22] but also within the poor nations. Within the national boundries, the gap increased between the

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[22] The theory of "development of underdevelopment" explains why this gap between the developing and developed countries exists. See Andre Gunder Frank: Capitalism and Underdevelopment in Latin America. 1969, Monthly Review Press.
--- "Sociology of Development and Underdevelopment of Sociology". in Latin America: Underdevelopment or Revolution. 1969, Monthly Review Press.
Paul Baran: The Political Economy of Growth. Penguine, Harmondsworth 1973--A pioneering work (first published in 1957) which is still influential and stimulating, despite its mistakes. Baran maintained that underdevelopment has been the natural outcome of a world capitalist system based on profit maximization for technically advanced countries. The colonial period was the advent of the politcal economy of backwardness.

rich and poor people, between the urban metropole centres and rural peripheral sectors, between the highly educated minority and less educated and uneducated majority.

An expanded schooling system did not prove to be a 'social equalizer', but has only benefitted those whose parents already have social and economic advantages. Certain economically and socially disadvantaged groups have continued to lag behind others in educational opportunities. Even with the ever increasing enrolments, adult literacy rates are still low and universal primary education is far from a reality. More than half of the school age children have no access to any kind of schooling.

The cost of supporting the established system is becoming prohibitively high. Almost all developing countries have reached a financial breakpoint as far as their allocation for education is concerned. They have neither the financial nor the human resources to expand their educational system any further. Wastage due to 'school dropouts' has also increased the financial waste. Not only have the costs of formal schooling risen faster than their national budgets, but the investment in schools - whether public or private - has not paid off in jobs for many of those who have completed various levels of schooling. There is an imbalance between the educational output and the manpower demand, because the outputs produced from schools are not congruent with the human resource needs of the country. Further schooling has fuelled rural urban migration

and increased unemployment and underemployment. Graduates at all levels have had great difficulty in acquiring the right kind of job they are qualified for, or expected.[23] Schooling has become more a ritualised process of qualification earning - a process of certifying or credentialling individuals which allowed them to compete more successfully for jobs against those who lacked such qualifications.[24]

Educational system emulated from the western nations have failed to provide relevant skills, knowledge and attitudes for mass participation in the development process. Schooling has not been effective in promoting cognitive achievement measured by school tests as had earlier expected. In this context, research results from Europe and the United States in the 1960s have been supported by studies in the 1970s for more than 20 developing countries.[25]

Formal schooling was to help create a society open to talent, reduce inequality among students, reduce differences

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[23] See Mark Blaug: The Problems of Employment in Developing Countries. ILO 1970.
M. Blaug et al.: The Causes of Graduate Unemployment in India. London: Penguine Press 1964.

[24] See Ronald Dore: The Diploma Disease: education, qualification and development. London: Allen and Unwin, 1976.

[25] John Simmons: The Effectiveness of Schooling in Promoting Learning: A Review of the Research. Working Paper No: 200 (Washington DC, World Bank 1974.
-------The Determinants of School Achievement: A Review of the Research for Developing Countries. Ottowa: IDRC, October, 1978.
------- & L. A. Alexander: "Factors which Promote School Achievement in Developing Countries: A Review of the Research" in John Simmons (ed) The Education Dilemma. 1980.

between students of diverse social origin with an attempt to maximize the development of each individual. In addition to these, education was mainly promoted to accelerate economic growth that would raise standard of living, especially for the poor and reduce inequality, generate equal employment opportunities for all, and encourage modern attitudes. Such optimisms of the 1950s and 1960s proved to be extremely exaggerated and in many instances false. The fact is that two decades of educational expansion has furthered disparities between the modern and traditional sectors, and increased unemployment and underemployment, lowered real wages, increased inequalities in income and members below the poverty line causing crisis in the development of the Third World. These resulting pessimism in the 1970's led to a search for new complementary, supplementary and alternative programmes in education to overcome the problems. It was within this context that the concept of nonformal education originated as a possible viable answer to the problems of education and development in the Third World.

1.3 Purpose

The purpose of this thesis is to examine the need for nonformal education as a complement, supplement and an alternative to formal education and see how it is likely to attack some of the educational and development crisis in

Third World countries which the formal system has failed to do. In order to examine the triple role of nonformal education in helping to solve the crisis, the thesis will first examine the issues of formal education in greater depth - its coverage, quality, effectiveness and problems it has compounded - and discuss its relationship to education and development crisis which most Third World nations face. The thesis will then develop a rationale for nonformal education and assess the potentialities of three types of nonformal education programmes which aim to complement, supplement and be an alternative to formal education. Examples of these programmes will be drawn from three countries with differing socio-political structures.

1.4 Methodology

The methodology used for completing this thesis, comprised of an examination of written materials related to education and development in the Third World context. An extensive library search was conducted to locate books, published and unpublished articles and international organization reports related to the study undertaken.

First, to understand the reasons for the proposed alternatives to formal education, two schools of thought were examined: "deschooling" that proposed the disestablishment of schooling, and "structuralism" that proposed structural transformation of society. Since these

two schools of thought were originated in the technologically advanced nations, literature related to their schooling was reviewed. Secondly, to determine an alternative development strategy for the Third World, critical issues in education and development in view of recent perspectives on Third World development were analyzed in detail, and from this enquiry various problems confronting the LDCs were deduced. Later, to establish a rationale for nonformal education as a viable complement, supplement and an alternative to formal education, selected literature published by several institutions and individuals involved in conceptualizing nonformal education was analyzed to relate it to the changing concepts of development.

Having developed a rationale for nonformal education as a probable solution to some of the education and development crises in the Third World, three programmes were selected to examine the potentials of nonformal education in the socio-econmic context of developing countries. The Third World countries chosen for examining the potentials of nonformal education, differ in their socio-political structure ranging from the revolutionary socialist China to partially socialist Tanzania and capitalist Botswana, not opposed to socialism. This choice was made to examine the extent of effect, different socio-political structure have on the success of nonformal education. Data for these case studies has been drawn from the primary sources and in the case of China, translation of Chinese published articles in

the journal, "Chinese Education" has been a great help.

1.5 Organization

The thesis is organized into six chapters. The introductory chapter is followed by Chapter 2 which reviews general criticisms of formal schooling as levied by "deschoolers" and "structuralists"[26] who provide a multidimensional critique of schooling portraying schools as "authoritarian" institutions of "elite domination", which legitimize the existing social and economic inequalities thereby maintaining the status quo in society. The discussion is drawn mainly from the literature of developed countries because the failure and shortcomings of schooling had been brought to forefront by writers in these countries, which led to a search for alternatives and reforms in schooling. But these observations also apply to schooling in developing countries because their schooling system is usually a replication of the western model.

Chapter 3 surveys the educational and development crisis in the Third World examining the critical issues in formal education and their causes. It also examines the changing concepts of development. Chapter 4 discusses the concepts and definitions which underpin the debate in

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[26] Structuralists are the proponents of structural theory and hold the view that education does not promote economic and social equality, but reproduce and legitimize inequality; thus maintaining the status quo of a society. They propose structural transformation of a society for promoting equality.

nonformal education and develops a rationale for it, which is supportive of the changing concept of development.

Chapter 5 provides three case studies of nonformal education programmes. The first case study represents the "work-study" approach in the People's Republic of China which is a revolutionary socialist country. This approach in China is an attempt to integrate formal schooling with work and production experience. The practical aspect of education is nonformal and therefore, in China nonformal education at all levels of schooling system from kindergarten to the university performs a complementary role to formal education. It is the merger of formal and nonformal education that enabled China to deformalize schooling. The second case study describes a mass education campaign for adults in Tanzania, a country which has been implementing socialist policies without undergoing voilent revolution like China. This case study deals with the "radio study group" approach to mass education campaigns with specific reference to health education. This nonformal education programme performs an alternative role to formal education. The third case study deals with an "employment-oriented" nonformal education for school leavers performing a supplementary role to formal education. The case study chosen is the "Bridages Training" of Botswana, which is a capitalist country, but not inimical to socialism.

The last chapter draws some of the limitations and possibilities of implementing nonformal education on a large

scale as the part of national development strategies in the Third World countries

2. CRITICISM OF FORMAL SCHOOLING

This chapter is focussed mainly on the different views held by educators, scholars and researchers in the late 1960s and early 1970s. Though the views presented here are the negative aspects of schooling, it however does not mean that schools are bad. Since the purpose of this study is to develop an alternative strategy for development, it is necessary to examine those negative aspects of schools that led to a search for alternatives and reforms in schooling.

Detailed and compelling critiques of formal schooling have been generated by many well known scholars like Paul Goodman,[27] Edgar Friedenberg,[28] John Holt,[29] James Coleman,[30] Christopher Jencks,[31] Charles Silberman,[32] Robert Dreeben,[33] McLuhan,[34] Ivan llich,[35] Everest Reimer,[36] Paulo

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[27] Paul Goodman: Growing Up Absurd. New York: Random House 1960.
[28] Edgar Friedenberg: Comming of Age in America. New York: Vintage Press, 1964.
[29] John Holt: How Children Fail. Pitman Publishing Corporation 1964.
[30] James S. Coleman et al.: Equality of Opportunity. Washington DC. US Govt. Printing Office, 1966.
[31] Christopher Jenck et al.: Inequality: A Reassesment of the Effect of Family and Schooling in America. New York: Basic Books, Inc., 1972.
[32] Charles Silberman: Crisis in the Classroom: The Remaking of American Education. New York: Random House 1970.
[33] Robert Dreeben: On what is Learned in School. Mass.: Addison-Wesley, 1968.
[34] Marshall McLuhan: Understanding Media: The Extension of Man. New American Library, 1944.
[35] Ivan Illich: Deschooling Society. New York: Random House, 1971.
[36] Everest Reimer: School is Dead: Alternative to Schooling. New York: Doubleday, 1971.

Freire.[37] This list is not exhaustive, and many more names could be added to this group of critics. They presented factors that are alleged to be threats to learning effectiveness and the development of individual students.

Much of what the radical critics had to say to educators was generally on the problems of education and development. The argument of this group of critics was that schools were not infinitely flexible institutions that can be adopted to any and all educational tasks. However, there was no consensus with regard to what the limitations of schooling were and why, there were constraints on what can be accomplished through formal schooling.[38] These critics' (deschoolers and structuralists) analysis of educational system was based on a wide ranging critique of the socio-political implications of education.

The attack on formal schooling from the "deschoolers" was multidimensional: schools teach largely useless and irrelevant knowledge to the young; they promote competitiveness and discourage co-operation; they kill desire to learn in children and alienate them from their society; they stifle creativity and development of an inquiring mind and independent thought; they foster

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[37] Paulo Freire: Pedagogy of the Oppressed. New York: The Seaburry Press, 1970.

[38] For a detailed analysis of limitations of schooling see Chistopher Hurn: Limits and Possibilities of Schooling: An Introduction to Sociology of Education. Boston: Allyn & Bacon Inc. 1978. Hurn presents a fresh interpretation of the relationship between schooling and society using two models - radical and functional paradigm - which provide the context of the analysis.

conformity; they lead many to equate education with schooling; they foster docility, passivity and submissiveness; they are oppressive, stultifying joyless institutions that crush and indoctrinate the mind of children; they are authoritative and manipulative; they are examination ridden and so on.

The most crucial criticism of formal schooling that came from the "structuralists" has been in relation to the interrelated role it plays in perpetuating a hierarchy of power and privilege in society. They are seen as instruments of elite domination which foster social inequalities, and instead of promoting social mobility, in the name of equality of opporturnity they reinforce and legitimize inequality. Schools help in promoting a system of class stratification and reproducing social division of labour by teaching class related values and attitudes. Such criticisms that were originally levelled against schooling in the developed countries do not mean that schooling in developing countries are devoid of any such flaws. Criticism of this nature was true to schooling everywhere.

With dissatisfaction increasing in the developed countries, similar criticisms were mounting in the developing countries too. In this respect Illich, Reimer and Friere are important names. The former two began questioning the problem in Latin America, but the greater disenchantment with the formal schooling system came from an entirely different consideration. Scholars in the Third World

countries who were analyzing the schools in the development context, were more concerned with the provision of education for children who lacked it and with the role of education in helping to overcome some of the economic problems that have confronted their countries. While these specific problems related to the Third World countries will be discussed in Chapter 3, this chapter as noted earlier, is mainly focussed on the general criticisms of schooling in terms of what usually happens inside most schools and how they serve the purpose of legitimizing inequality.

2.1 Institutional Criticism

Schools were criticized for being: legally compulsory, not voluntary; age bound, not lifelong; subject-centered, not person-centered; book-centered, not experience-centered; teacher-centered, not learner-centered; competitive, not collaborative; beauracratically fixed on grades, diplomas and degrees, not mastery-oriented; institutions controlling of behavior, not responsive to needs; invidious and advantageous, not equalizing and compassionate.[39] These multitude of constricting conditions have been said to characterize virtually schools everywhere.

The relationship between the teacher and students in a standard setting of compulsory schooling, characterized by a

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[39] Ronald Ross: "After Deschooling, Free Schooling". in Allan Gartner et al.(ed): After Deschooling What? New York: Harper & Row Publishers. 1973, pp.153-154.

pre-determined syllabus and graded examination was criticized for contaminating the entire learning process. It is for this reason schools have been equated with concentration camps, where "the pupil is schooled to confuse teaching with learning, grade advancement with education, a diploma with competence and fluency with the ability to say someting new. Not only education, but the whole social reality is schooled".[40] It is the 'structure of school' itself, what Illich calls the "hidden curriculum", which conveys the message that only through schooling can an individual prepare himself for adulthood in a society, that what is not taught in school is of little value and that what is learned outside of school is not worth knowing.[41] It is called the 'hidden curriculum of schooling' because it constitutes an unalterable framework of the system within which all changes are made.

2.1.1 Authoritarianism

Schools have been characterized by detailed control over the behavior of students to a degree that would be considered intolerable outside these institutions. Noise and movement on their part is defined as an interference with the process of learning. Therefore, students are required to act as though they were alone in a crowd of other students

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[40] Ivan Illich: Deschooling Society. New York: Harper and Row Publications, 1971, p.1.

[41] Ivan Illich: "Alternative to Schooling". Saturday Review, June, 19, 1971, p.48.

with whom they have a significant relationship.[42] The teacher is intentionally didactic and dictatorial. He/she takes charge of what goes on, because he/she believes that the purpose of teaching is to communicate a specific amount of subject matter to the students who are looked upon as 'empty vessels' to be filled with information. In such a system, Paulo Freire stresses that:

> "teaching becomes an act of depositing, in which the students are the depositories and the teacher issues communiques and makes deposits which the students patiently receive, memorize and repeat. This is the 'banking concept of education'...The teacher chooses and enforces his choice and the students comply... The teacher acts and the students have the illusion of acting through the action of teacher".[43]

Schools in which a student is perceived as an 'empty vault' into which the teacher deposits the 'profundities' he is endowed with, oppress the child. In this system of education, excessive questioning is discouraged. 'Banking education', as Freire indicated, anesthesizes and inhibits creative power and attempts to maintain the subversion of consciousness.[44] Schools, operating on such assumptions, hold children in a prolonged state of dependency, keep them from discovering their own capacities for learning, and encourage a sense of impotence and lack of worth.[45]

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[42] Phillip Jackson: Life in the Classroom. New York: Holt Rinehart and Wilson, 1968.
[43] Paulo Freire: Pedagogy of the Oppressed. New York: Herder & Herder, 1970, pp.58-59.
[44] See P. Freire: op.cit. in which Freire explains how the oppression dominates upon all aspects of human condition and how in the consequence of oppression, man is dehumanized
[45] B.B. Stretch: "The Rise of the Free Schools". in Saturday Review, June, 20, 1970, p.76.

Teachers maintain order and discipline by way of their personality but in most cases it is achieved by explicit control over students' behavior by way of punishment - a means of controlling people through manipulation of external force. Punishment which is either in physical context (corporal punishment, which is still the rule in some schools especially in the developing world) or in social context (inflicting punishment with emotional consequences) results in conflict, aggression, deception, revenge - the emotional problems that account for many hangups in later life.[46] These characteristics are opposite to what education should be developing in students, because the goal of education is the production of an intelligent behavior - the production of autonomous, independent, self-directing, responsible, problem solving, forever-seeking people.[47] These are internal matters achieved by deeply personal exploration and discovery, and not by threats. Punishment is not an apt means to achieve educational goals.

In this context of detailed control over students' behavior in class and school premises, critics have compared schools with prisons, hospitals and army induction centers. The restraints and control over students' behavior may often lead them to resentment, hostility that may take the form of a withdrawl of intellectual energies, and a passive sullen

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[46] Arthur W. Combs: Myths in Education: beliefs that hinder progress and their alternatives. Boston: Allyn & Bacon Inc., 1979, p.133.
[47] Ibid. p.135.

style of learning.[48] All these detailed behavioral controls do not enhance the kind of activeness and enthusiasm that are essential for effective learning.

2.1.2 Education As A Commodity

With regard to learning, the curriculum of school itself has been under criticism. It is criticized as increasingly irrelevant and irrational, because children are forced to learn subjects that have little relevance to their life. There is little relationship between what they learn in school and what they are expected to be doing later in life. It is argued that schools have failed to teach all students the simple basic skills required for employment. Hurn noted that most students graduate from high school without being able to speak or write clear and correct sentences.[49] This could be an exaggeration, but not untrue. This critique is true of less prestigious institutions. Usually schools do not teach relevant curriculum, but when they do, they fail to teach the children how they can relate that learning to their life outside school.

What schools do, is to transmit particular kinds of knowledge to students that do not necessarily have any direct functional relevance to the performance of adult roles, but which nevertheless survive because of the prestige attached to those subjects and the vested interest

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[48] Christopher Hurn: op.cit. 1978, p.224.
[49] Ibid. p.13.

that educators have in preserving the forms of knowledge in curriculum. Therefore, as Hurn notes, 'much of what schools teach is quite arbitrary in functional terms'.[50] Not only much of what is taught is unrelated to the life outside, but it is also not learnt for the intrinsic value of the subject. It is learnt only as a means for social enhancement that the certified knowledge brings.

Learning primarily for the intrinsic value is what Richard Rowson[51] calls "learning for learning's sake". Learning is an acquisition of knowledge and cognitive skills, but in practice, this has mainly been narrowed by using standardized tests for measuring retention of specific subject matter, while the higher cognitive processes like abstract reasoning, problem solving and creativity among others, are seldom measured. This makes learning, a process of absorbing as much information as possible for regurgating in examination. Learning is therefore translated from an activity into a commodity, and man is the consumer of the product, learning.

The more learning an individual consumes, the more "knowledge-stock" he acquires. The knowledge is usually acquired through a gradual process of consumption, and the degree of success an individual enjoys in a society, depends

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[50] Ibid. p.191.

[51] R. Rowson: "Learning For Learning's Sake". in Peter Buckman (ed) op.cit. 1973, pp.113-121.

on the amount of learning he consumes.[52] But the process of learning (consuming as much information as possible) in schools is merely mechanical, which does not involve intellectual ability, reasoning capacity or creativity, because of its total emphasis on answers. William Glacer stressed that schools have been dominated by the 'certainty principles' according to which, there is a right and wrong answer to every question, and the function of education is then to ensure that every student knows the right answers to a series of questions.[53] Thus, students treated as empty vessels and filled with facts, get trained as computers to give predictable answers to predictable questions.

When students are not given chance to think about the problems of their own world, and when they are rewarded for remembering what others deemed necessary and important, they begin to believe that right answers will solve all problems or (as they discover more difficult problems) that problems are generally insoluble through the use of formal education. Schools focussing on methods that stress rightness and wrongness in learning, destroy independence and creativity, as well as equip children poorly for complexities and ambiguities of the real world.

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[52] Ivan Illich: "Alternative to Schooling". in John Martin Rich (ed): Innovations in Education. Boston: Allyn and Bacon, Inc., 1981, p.95.

[53] William Glacer: Schools Without Failure. New York: Harper & Row Publishers, 1969. p.36.

2.1.3 Schools promote Competition and Discourage Co-operation

Success at examinations in school has been the major index of a successful education - the quality of education being judged by the grades achieved. School achievement, measured by the amount of factual material the students retained, is reflected on students' grades or marks which have become substitutes for learning and a symbolic replacement for knowledge.

Many studies have also linked personality traits to school grades. A review of research in developed and developing countries revealed that students have been uniformly penalized for creativity, autonomy, initiativeness, tolerance for ambiguity, originality, independence of thought and judgement, cognitive flexibility, complexity of thought, self confidence and verbal activity.[54] On the other hand, they have been rewarded for deferred gratification, perseverance, mastery, good student values and the other non-cognitive traits indicative of docility, industry and ego-control.[55] In spite of their inaccuracy, grades are valued as indicators of students' status and progress and even accepted as instruments for opening or closing the door of schools and colleges. Educational credentials that certify the knowledge

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[54] John Simmons: How Effective Is Schooling In Promoting Learning: A Review of Research. IBRD, Staff Working Paper No: 200, March 1975, Table III.1 and III.2, p.25.

[55] Ibid.

an individual possess, do not necessarily reflect an individual's ability to function in a particular capacity, but serve to denote membership in a society's elite group.

The system of grading that has been considered as a motivator, affects students' "self concept", which plays a critical role in their human life behavior. Parents, teachers and the general public, place value on grades. These become powerful indicators of personal worth from which students learn that they are "bright", "average", "dull", "incompetent", "acceptable or unacceptable", "good or bad", not just as students, but more broadly as persons.[56] Grades as means of evaluation, label student as "who" and "what" he or she is and such labels become self-fulfilling. With the help of grading system, schools sort and select students into broad categories like "brilliant", "stupid", "college material", "dropouts" etc. that have important consequences for future status.

Since importance has been attached to grades, within school studying becomes a matter of competing with other students and this competition often used as an incentive to study, becomes so integrated into the learning/studying that for many, these two - studying and competition - become indistinguishable. Their competitive attitude results in the students' attention being focussed on comparing their performance with that of others, rather than in considering the value intrinsic to their own performance. The more

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[56] A.W. Combs: op.cit. p.179.

competent they are at study, the greater is the pressure for them to do this and the less chance they have to reflect, to follow their own interest or to make spontaneous exploration. Study with its competitive association, becomes totally alien to any inclinations students may have to develop their own interest at their own pace.[57]

Competition does indeed motivate people sometimes, but it also discourages and disillusions several others and destroys human potential. When competition becomes too important, Combs[58] stresses that morality breaks down and any means becomes acceptable to achieve the desired ends. The system of evaluation and competition develops negative effects on the self-concept of those students who are unsuccessful. This low self-esteem concept of oneself virtually insures continued failure in the game of schooling. So the system of grading and competition useful for a few, could be harmful for many.

In view of the authoritarianism that structures many classrooms, the stress on grades and discipline at the expense of learning, and the suppression on natural curiosity and instincts of the young, critics have portrayed schools as inhuman and repressive institutions which have failed to enhance individual development. The "deshoolers" who believed that schools are repressive and inhuman institutions advocated their dethronement. However, before

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[57] Richard Rowson: "Learning For Learning's Sake". in Peter Buckman (ed): Education Without School. 1973, p.114.
[58] A.W. Combs: op.cit. p.116.

examining the logic and consequences of their proposal, it is necessary to see why schools operate the way they do in their relationship with the society they serve. The general observation is that schools have been operating thus, in order to produce a labour force that is compatible with the need of the society and to not only perpetuate, but also to legitimize social and economic inequality.

2.2 Schools Perpetuate Social and Economic Inequality

Functionalists[59] agree with what goes on inside schools to be logical. They view schools as rational instruments for sorting and selecting the most talented individuals so that they attain the highest positions; and also teaching the kind of congnitive skills, norms and values that are essential for the performance of adult roles. The radical critics on the other hand, do not view schools as more or less rational instruments for sorting and selecting talented people, but as institutions perpetuating the existing inequality and convincing the lower class groups of their inferiority and thereby supporting the conservative and political forces. The vast class and race differences in educational achievement led the critics to believe that educational expansion had been introduced not to create

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[59] Functionalists are those sociologists who rationalize and justify the functions of schooling. They believe that what schools do is right and therefore, provide an explanation to school activities as rational. The major proponent of functionalist theory was Talcott Parson.

equality of opportunity but to preserve the power of privileged groups.[60] In such a context, schools are viewed by critics as instruments of elite domination which foster compliance and docility, rather than independent thought and human value. Schools that repress and stifle imagination of their students and fail to teach them to think independently, succeed in preventing an imposition of intolerable threat to the legitimacy of the position of dominant class.

Therefore, the most severe criticism of schooling from the "structuralists" has been with regard to its role in perpetuating a hierarchy of power and privilege in a society serving the interest of dominant class and providing legitimacy to the existing inequalities. From this point of view, some have argued that schooling functioned not as institutions of "liberation" but as one of "cultural imperialism" heavily influence in one way or the other by the "haves" (in developing and developed countries) to perpetuate advantage. Carnoy argues that:

> "The imperial power attempted through schooling, to turn the colonized for roles that suited the colonizer. Even within the dominant countries themselves, schooling did not affect social inequities. The educational system was no more just or equal than the economy and society itself - especially --- because schooling was organized to develop and maintain --- an inherently inequitable and unjust organization.[61]"

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[60] Christopher Hurn: Limits and Possibilities of Schooling. 1978, preface p.ii.

[61] Martin Carnoy: Education as Cultural Imperialism. New York: David McKay, 1974, p.3.

The argument implies that replication of western educational institution of the rich nations into the poor societies of the world did not mitigate the disparities that exist in these countries. In fact, the role of western education, both within the Third World and in the developed nations themselves has been misinterpreted by educators and social scientists, who presented an explanation that schooling has provided and continues to provide the means for individual and societal liberation. In views similar to those of Carnoy, Bowles and Gintis comment on the United States' economic system thus:

> "Making U.S. capitalism work involves: ensuring the minimal participation in decision making by the majority (the workers); protecting a single minority (capitalists & managers) against the wills of a majority; and subjecting the majority to the maximal influence of this single unrepresentative minority.[62]"

In such an undemocratic structure, few people own and control the bulk of production resources, while most only own their labour, and the actions of majority of workers (exploited) are controlled by a small minority of owners and managers (exploiters). Furthermore, it is typified by the hierarchical division of labour and bureaucratic authority and often systematically stratified by race, sex, education and social class. This hierarchy exists in every capitalist society.

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[62] S.Bowles and H.Gintis: Schooling in Capitalist America. 1976, p.54.

The hierarchy, bureaucracy and social stratification have been used by capitalists, whether in the developed or developing capitalist societies, to stabilize the totalitarian system of economic power. For the security of capitalist profits and the stability of capitalist division of labour, it is necessary to perpetuate the existing social relation of production. Bowles and Gintis maintain that the reproduction of social relation of production depends on the reproduction of consciousness, which is integral to the perpetuation, validation and smooth operation of economic institutions[63] and it is education that functions primarily to support this capitalist economy.

To produce a labour force, schools are hence destined not to foster patterns of personal development and social equality, but to legitimize inequality, limit personal development to forms compatible with submission to arbitrary authority and help in the process whereby youths are resigned to their fate. The educational system therefore does not add or substract from the overall degree of inequality and repression originating in the economic sphere, but reproduce and legitimize a pre-existing pattern. This is done in a process of training and stratifying the work force and facilitating a smooth integration of youth into it.

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[63] Ibid. p.127.

2.2.1 Social Relation of School and Workplace

Considering schools in the light of social relations of economic life, Bowles and Gintis have maintained that major aspects of educational organization replicate the relationship of dominance and subordinacy in the economic sphere. The correspondence between the social relations of school and work, accounts for the ability of educational system to produce an amenable and fragmented labour force habituating students to the discipline of workplace. The central role of institutional structure is thus summarized in what Bowles and Gintis termed as "the correspondence principle,"[64] which indicates that the capitalist class will attempt to structure the social organization of schooling so as to correspond with the social relations of production. What the educators call the "hidden curriculum" is thus of paramount importance.

The relationship of domination and subordinacy in education differs by the level of education. For the reasons that different qualities and norms are required among workers in different levels of the hierarchy of work force, different levels and kinds of schooling help to foster essential forms of consciousness among students through educational encounter. The non-cognitive traits like obedience, punctuality, respect for authority, orderly work habits, ability to follow instructions, are the kinds of qualities and personality charateristics essential for the

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[64] See Bowles and Gintis: op.cit. pp.131-141.

performance of low and middle status occupations. Schools, whose graduates are more likely to enter predominantly low status occupation, therefore stress on docility, compliance and conformity; to produce loyal, compliant and efficient workers in jobs that allow minimal discretion in choice of tasks and conformity to external behavioral rules. The concern over rules at the elementary school level which tend to severely limit and channel the activities of students, thus mirror the close supervision of workers at lower levels.

For the performance of middle and high status jobs, employees need some degree of flexibility, an ability to tolerate ambiguity and be able to get along smoothly with colleagues and bosses, develop favourable attitudes toward change and innovation, and work without direct supervision. Elite colleges and universities or schools serving elite groups, whose graduates are likely to pursue high level status occupation are therefore only superficially less repressive. They encourage students to develop some degree of sustained independent work, allowing them to work at their own pace without any continuous supervision, to make intelligent choices among many alternatives, to work for long term future rewards and internalize rule of behavior

rather than to depend on specific and frequent instruction.[65] At the highest level of education, the elite colleges and universities that stress the internalization of norms of enterprise and freedom from continual supervision, reflect the social relationship of upper-level white collar work.[66]

Within schools, students' lack of control over his or her education and alienation from the curriculum content reflect the alienated labour and workers' lack of control over the content of his job. The motivational system involving grades and other external rewards and the threat of failure, rather than the intrinsic benefits of the process of education (learning) or its tangible outcome (knowledge), reflect closely the role of wages and the specter of unemployment in the motivation of workers.[67] The principle of rewarding excellence in the educational promotion and selection serves to socialize young people to work for external rewards and encourage them to develop motivational structure fit for alienating work in the capitalist economy.[68] The institutionalization and often destructive competition among students, and the

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[65] in C. Hurn: op.cit. 1978, p.51.

[66] Jean Binstock: "Survival in the American College Industry". unpublished Ph.D. dissertation, Brandens Universtity 1970, quoted in Bowles and Gintis: op.cit. p.132.

[67] Bowles and Gintis: op.cit. 1976, p.12.

[68] Herbert Gintis: "Education, Technology and Work productivity". in Martin Carnoy: Schooling in a Corporate Society: The Political Economy of American Education. New York: David McKay, 1975. p.64.

specialization and compartmentalization of academic knowledge through continual and ostensibly meritocratic rating and evaluation, reflect the fragmentation in work.

2.2.2 Inequality in Schooling and Social Reproduction

Education is a means of social and economic mobility for the majority of people, but it is more likely that majority of the children from lower socio-economic levels attend inferior schools and end up in low level jobs, while minority of those from higher socio-economic strata who most often attend private schools and colleges compared with lower class children, acquire higher position jobs. Inferior schooling was viewed by social scientists as a crucial part of the link between socio-economic status and school achievement.[69] Inferior or superior school refers to the quality of school which is evaluated on three distinct perspectives - resources allocated, social exclusiveness and what schools teach. From these three perspectives, inequality is found not only in between, but also within schools.[70]

Inequality Between Schools: Variation in educational expenditure was believed to be one of the reasons for

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[69] School achievement is referred to the performance of students in school as well as how much education children acquire i.e. degree or diploma they acquire.

[70] Christopher Jencks et al.: Inequality: A Reassesment of the Effect of Family and Schooling in America. New York: Basic Books Inc., 1972, p.23.

unequal educational outcome. James Coleman and his associates expected that their statistical study would show that unequal school resources were important in explaining the failure of many lower class students to learn as effectively as middle class students and that financial redistribution would correct educational inequality. While they did identify positive effects of the quality of teacher, the weight of evidence seemed to point to the virtual irrelevance of educational resources or quality as determinant of educational outcome.[71]

Coleman's research has been confirmed by Jencks and his associates, who maintain that unequal educational expenditures do not account for the fact that some children learn to read more competently than others, nor the fact that some adults are economically more successful than others[72] and eliminating differences between schools would do almost nothing to make adults more equal.[73] This conclusion has received substantial support from the studies of school achievement in many different countries.[74] However, this does not mean that resources fail actually and potentially to affect students' outcome, but Averech et al. emphasize that so far studies have failed to show that

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[71] See James S. Coleman: et al.: Equality of Educational Opportunity. Washington DC. Govt. Printing Office, 1966.
[72] C. Jencks et al.: op.cit. 1972, p.29.
[73] Ibid. p16.
[74] see John Simmons: How Effective Schooling is in Promoting Learning: A Review of the Research IBRD, 1975.

school resources do effect students' outcome.[75]

The argument that lower class children attend inferior schools and therefore receive inferior education could partly be true, because well to do schools serving middle class children undoubtedly stress on attitudes, values and norms that help children succeed later in life. They teach them how to operate in a society which is essentially a middle class world: a world that is often as unfamiliar to lower class children as it is taken for granted by middle class children.[76] There is a possibility that in such schools lower class children might learn values, ideals and attitudes that might have consequence for future careers.

Coleman et al. compared the outcomes of poor students who attended majority of poor schools with the outcomes of poor students who attended majority middle-class schools and found apparently superior performance of the latter. From such findings he drew the conclusion that "a pupils' achievement is strongly related to the educational background and aspirations of other students in school".[77] However, Averech et al. reviewed the evidence and suggested that peer group influence is complex, but there is little evidence that a student's classmates exercise a strong, independent influence on his educational outcomes. So neither school resources nor peer group influence which can

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[75] Harvey A. Averech et al.: How Effective is Schooling? A Critical Review of Research. Rand Corporation, U.S.A. 1974, p.157.

[76] C. Hurn: op.cit. 1978, p.179.

[77] James S. Coleman et al.: op.cit. 1966, p.22.

be manipulated, seem to have strong influence on students' educational outcome. On the other hand, Jencks noted that family influence dependent on its socio-economic level have much influence on an individual's educational achievement.[78]

Inequality Within Schools: Inequality in education not only exists between schools, but within a given school, different children receive different kind of education. Class stratification within school is achieved through assigning students into different tracks or curriculum. At the primary levels, students are evaluated according to a common set of expectations. They are grouped into separate classes, classified as 'fast' and 'slow' learners. It has also been noted that teachers even group children by ability within a classroom.[79] Later on pupils are gradually differentiated along the achievement axis where their new individual status is earned through differential performance.

Elementary school tracking may influence high school curriculum assignment. On evaluating students' ability they are grouped into "college preparatory curriculum", "technical curriculum", "business curriculum", or "general curriculum". These are sometimes further classified into

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[78] C. Jencks et al.: op.cit. 1972, p.254.

[79] See Ray Rist: "Social Class and Teacher Expectations: The self-fulfilling Prophecy in Ghetto Education". Harvard Educational Review, 20:1970, pp.411-451. Rist provides a good description of grouping within classroom and some suggestive evidence on its effects.

'slow' and 'fast' learners' tracks within the curriculum.[80] The curriculum track into which a student is assigned, has some impact on students' chance of attending college[81] and this has some indirect affect on the later occupation status and earnings of students. Tracking is therefore, one measurable factor that influences attainment and it explains differences in students' achievement. It is more likely for the lower class children to end up in the curriculum track that carries less prestige and which channels them into low status occupations.

Olive Banks[82] highlights some of the studies which indicate that working class (the lower soicio-economic group) children are less likely than the middle class children to enter the more academic types of secondary education and even if they do, they are less likely to complete the course. Ben David[83] quoted evidence from Germany that suggested that working-class entry to academic secondary education has been considerably more restricted than in England and Wales. Switzerland and Belgium also illustrate the same pattern of class difference.[84] It is not only that lower classes are assigned into less prestigious tracks, but even dropping out of school before graduating is

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[80] Jencks et al.: op.cit. 1972, p.33.

[81] See Chapter 5 The Effect of Curriculum Placement, in Jencks et al.: op.cit. 1972,

[82] Olive Banks: The Sociology of Education. Montreal: The Copp Clark Publishing Co. 1971, pp.41-55.

[83] J.B.David: "Profession in Class System of Present Day Societies". Current Sociology, V:12, No:3, 1963-63, pp 88-91. cited in Olive Banks op.cit. p.51.

[84] Olive Banks: op.cit. p.51.

more characteristic of low status families measured in terms of income and of father's occupation.[85] Dropout rate from secondary education in the U.S.S.R. seems to vary with the occupational level of parents. Technical schools have a lower proportion of the 'intelligentsia' than schools leading to higher education.[86]

The findings of class difference indicate that in spite of national differences, children from lower class are always at a considerable disadvantage compared with middle class children. Merit, intelligence, ability and talents have been used to disguise an essentially unjust social screening function of schooling. The measurement of ability and intelligence has been institutionalized in the form of examinations which are ostensibly designed as a part of the process of democratization and social justice. But the content of examinations and of I.Q. tests is geared to the norms and values of the already privileged class.

2.2.3 Socio-economic Background and Educational Outcome

The educational outcome (assessed by standardized tests measures partly the cognitive skills) often reveal that children whose parents are highly educated, perform relatively better than children whose parents are less educated. Even in theoretically egalitarian schools of the

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[85] Ibid. p.56.

[86] M. Yanowitch and N. Dodge: "Social Class and Education: Soviet Findings and Reactions". Comparative Education Review, V:12, No:3. in O. Banks op.cit. p.53.

Soviet Union, the best places in the best schools and the best grades seem to go disproportionately to children of the highest social strata.[87]

This is because, economically successful parents help their children retain their privileges by making sure that their children get a good education and all that entails. It is more likely that children with affluent parents attain more credentials than children with poor parents, because the affluent parents have high educational aspirations for their children. Even if the children have no special aptitude for academic work and dislike school life, they feel they ought to stay in school because of more pressure from parents. The pressure from home explains much of the differences between middle and lower class students' aspirations and expectations.[88]

Another explanation for high educational aspirations is the higher occupational aspiration. The aspirations and expectations of students and parents concerning both the type and amount of schooling and occupation are strongly related to the social class.[89] These aspects of family socialization are reinforced by schools through the expectations of teachers, school administrators and guidance

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[87] Davin Ravitch: "The Great Equalizer". in John Martin Rich (ed): Innovation in Education. 1981, p.134.

[88] See W.H. Sewell et al.: "The Educational and Early Occupational Status Attainment Process: Replication and Revision". American Sociological Review, 35:1970, Dec., pp.1014-1027.

[89] S.M. Lipset & R. Bendix: "Social Mobility in Industrial Society". 1959 in M. Carnoy (ed): Schooling in a Corporate Society. 1975, p.60.

concellors, who encourage students to develop aspirations and expectations typical of their social class even if the child tends to have deviant aspirations.[90]

Job performance is a function of non-cognitive traits as well as cognitive abilities. Non cognitive traits are in fact more important than cognitive skills in obtaining benefits after going to work, such as a strong influence on workers earnings, productivity and satisfaction.[91] Non-cognitive traits associated with the adequate performance of job are developed primarily at young age, both in family and to some extent in schools. Children of managers and professionals are taught self-reliance within a broad set of constraints and the children of production-line workers are taught obedience at home.[92]

Bowles maintains that the discipline oriented early socialization patterns the lower class children encounter at home, is complemented by the authoritarian social relation of working class high school.[93] The development of self-reliance and independence of training characteristic of upper-middle class families, is reinforced by the freedom allowed in urban or private prestigious schools and higher education, which develop the capacity for sustained independent work and other characteristics required for

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[90] M. Carnoy (ed): 1975. op.cit. p.60.
[91] See H. Gintis: "Education, Technology and Characterstics of Worker Productivity". American Economic Review, 61:1971, pp.266-279.
[92] S.Bowles: "Unequal Education and Social Division of Labour". in M.Carnoy (ed): op.cit. 1975, p.59.
[93] Ibid.

adequate job performance in the upper levels of occupational hierarchy.[94] The characteristics of students, rather than the characteristics of schools, have been identified as more significant in unequal achievement. Jencks et al. have pointed out that children appear to be far more influenced by what happens at home than by what happens in school.[95] Students' background factors are therefore important, and as Averech et al. maintain, the socio-economic status of a student's family invariably prove to be significant predictors of his/her educational outcome.

Due to the strong influence of family, Bowles maintains that schools are probably more effective when they attempt to complement and reinforce the socialization process of home and neighbourhood, rather than oppose them. Because there is a close association between the years of schooling and socio-economic status, the education system is alleged to perpetuate the existing social order. By treating years of schooling and the test scores (largely determined by non-school factors of hereditary and environment) as objective determinent of merit, the belief is reinforced that promotion and rewards are distributed fairly and that people in the high status position do deserve the position, because they are more talented and hard working than others. This helps to justify the elites as superior individuals and serves to convince the lower class that they owe their

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[94] Ibid. p.52.

[95] Jencks et al.: op.cit. p.255.

destiny to their lack of individual ability. The close relationship between educational attainment and later occupational success thus provides a meritocratic appearance to mask the mechanism that reproduces the class system.

Therefore, schools remain as institutions to socialize students to accept the legitimacy of the existing system of education and its discipline. They serve primarily as selection and certification agencies whose job is to measure and label people, and only secondarily as socialization process whose job is to change people. This contention, as Jencks maintains, implies that schools serve primarily to legitimize inequality and not to create it. Schools in both developed and developing countries far from equalizing the society, reproduce and legitimize the social and economic inequalities. It is for this reason that structuralists sugggest that change in the socio-economic structure of the society is a pre-requisite to make any changes in the structure of education successful and reduce inequality. While on the one hand, formal education system has helped to maintain the status quo of the society by reproducing inequality, on the other hand, in the Third World it has also increased inequality giving rise to other problems which have confronted them. This is mainly because education is not as widely distributed as it is in the developed countries. These problems will be looked into, in the following chapter.

3. EDUCATION AND DEVELOPMENT CRISIS IN THE THIRD WORLD COUNTRIES

This chapter attempts to examine the experiences and successes which the Third World countries had with formal education - whether it has been an aid or an obstacle to development. Secondly it proposes elements of an alternative strategy for development in which education can play a more productive role in the development process.

3.1 Critical Issues of Formal Education in the Developing Countries

The educational system in developing countries expanded rapidly with relatively little change in their structures boosting the number of students and the percentage receiving schooling at every level. The strategy of "linear expansion" emphasized primarily quantitative growth, with correspondingly less emphasis on the qualitative aspects of education and its relation to changing needs and especially the needs of majority of the population. This policy of quantitative expansion eventually brought the educational system into a 'crisis' - a crisis of maladjustment between the system and its environment, probably creating more problems than it solved. Some of the major problems that characterize the educational system of the Third World today are: (i)Discrepancy between educational demand and supply. (ii)Rising educational expenditure against a background of

very limited resources. (iii)Wastage in education as a result of high dropout and repetition rates. (iv)Declining quality of education and perpetuation of outmoded and irrelevant curriculum. (v)Increasing unemployment of the educated. (vi)The migration to the urban centres of those receiving an education.

3.1.1 Discrepancy Between Educational Demand and Supply

Despite massive expansion of the educational systems, most Third World countries, especially the least developed nations[96] have been unable to provide enough places in their educational institutions to keep pace with the increasing popular demand; thus a disparity between demand and supply has persisted, and in many instances has been widened.

Education is a self-escalating industry creating its own dynamic with a new supply of any kind of education immediately generating a new demand. Expansion of primary education[97] generates pressure for expansion of secondary education. Increasing numbers of secondary school leavers

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[96] Within the Third World, nations are classified into three groups based on the criteria of income, literacy and industrialization. (a)42 poorest countries are designated by the United Nations as the 'least developed' and are sometimes referred to as the "fouth world", because of the lowest per capita income, highest illiteracy and little industrialization. (b)The remaining 83 developing countries constitute the 63 non oil exporting and 13 oil rich nations which are referred to as the 'less developed' countries. All the 118 countries constitute the Third World which are often collectively referred to as 'developing countries', 'LDCs', 'underdeveloped' and 'Third World'.

[97] The terms 'primary education', 'first level education', and 'elementary education' are used interchangeably. Primary education in LDCs varies from 5 to 7 years.

create an increasing demand for more places in higher education. This in turn mounts pressure on the expansion of post graduate studies.

The picture of education as a self-generating industry is evident from the enrolment at all levels of education which more than tripled in the third quarter of the century between 1950 and 1975 (see Table I).

Table I

Growth of Enrolment by Levels from 1950 to 1975.

Region	Year	Pupils Enrolled (in Millions) I Level	II Level	III Level
Africa	1950	8.5	0.75	0.07
	1975	44.8	8.50	0.88
Increase		(5.25)	(11.3)	(12.5)
Asia	1950	53.3	12.7	1.0
	1975	159.6	61.6	8.5
Increase		(2.9)	(4.8)	(8.5)
Latin America	1950	15.4	1.7	0.28
	1975	56.9	12.4	3.61
Increase		(3.7)	(7.3)	(12.4)
Developing Countries	1950	77.2	15.2	1.35
	1975	261.3	82.55	12.99

Source: P. H. Coombs: Future Critical World Issues. 1981, Table 5, p.16.
The figure in parenthesis ( ) indicate the number of times enrolment increased at each level in 25 years.

The push began at the first level where enrolment grew from 77.2 million to 261.3 million during the 25 year period. At the secondary level, enrolment rose from 15.2 million in 1950 to 82.55 million in 1975, while students in the

tertiary level increased from 1.35 million to 12.99 million. Based on the calculations from table I, enrolment in the three developing regions i.e. in Asia, Africa and Latin America during the 1950-75 period increased 3.3 times at the first level, 5.3 times at the secondary level and 9.6 times at the tertiary level. This indicates that the rate of increase in enrolment at the secondary and tertiary levels were substantially higher than at the primary level.

In most cases enrolment at the higher level exceeded the target which the various governments had previously set. For example in Nigeria, university enrolments increased from less than 2,000 in 1960 to nearly 8,000 in 1967 exceeding the Ashby Commission target of 7,500 set for 1970. Similarly, in middle African countries, the expansion of higher education exceeded the targets set in their national development plans and, for the area as a whole, the observed increase in enrolment from 1960-65 was 150% instead of 91% planned at the Addis Ababa and Tananarive Conference in 1961 and 1962.[98] The greater expansion at the higher levels is an indication of great pressure from public for such levels of education, especially from the rising middle class.

Even with this enormous increase, most Third World countries find it difficult to keep pace with the even faster growing demand for education, because of an extraordinary growth of the youth population. With the

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[98] Frederick H. Harbison: Human Resources as the Wealth of Nations. New York: Oxford University Press, 1973, p.59.

present age structure and increasing life expectancy[99] the actual population is bound to grow for decades until fertility is reduced to the replacement level.

A set of projections by the United Nations Population Division implies that the birth rate will decline from 48 to 27 per 1000 in the Third World by the year 2000 and with mortality also declining, population will still be increasing at that time at about 2% p.a. The population of the developing world will by then represent 76.3% of the total population of the world. The 2.7 billion population of the developing countries (1970) will increase to over 5.1 billion by 2000 and 9 billion by the year 2050, by which time average fertility may have declined to a replacement level. But the actual numbers may continue to rise and only tend to stabilize around 10.5 billion by the early part of the 22nd century. For the world as a whole, zero growth would imply a total of 12 billion by the end of the 21st century, with a virtual stabilization of population in the developed nations, as designated today from the year 2050. By the year 2100 population in the Third World will account for 84% of the total.[100] It is further projected that in the Third World, 40 or more percent of the population is likely

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[99] Life expectancy in the 'least developed' nations is 43 years, in Less developed countries is 54 years compared with 71 years in the developed world - quoted in M. Todaro: Economic Development in the Third World. 1977, p.28.

[100] Victor L. Uriquidi: "Human Resources in the Developing World - A Forward Look". in Yohanan Ramati (ed): Economic Growth in Developing Countries - Material and Human Resouces: proceedings of the 7th Rehovot Conference. New York: Praeger Pub. 1975, p.45.

to be under the age of 15 by the year 2000.[101]

With an extraordinary increase in school age population, the demand on education will be even greater than today. Because of this, schools must provide a much faster supply of places to absorb all children or at least grow at the same rate in order to maintain stability. Based on the UN 1978 assessment, Coombs[102] indicates that in order to maintain the enrolment ratio existing in 1975 for 6 to 11 year olds, Africa will have to increase enrolments by 107% by 2000, Latin America by 75% and Asia by 63%. Further to maintain the enrolment growth rates at each level of education existing prior to 1975, Africa would have to expand enrolments at all levels by 111 million between 1975 and 2000, compared to 44 million actually added between 1950 and 1975. Latin America would have to increase total enrolment by 94 million against 55 million added in the previous 25 years. The required addition for Asia would be 212 million against 153 million that was added in the third quarter of a century.[103] But when we take a look at the situation in the Third World, we find the system may not be able to meet the demand.

If one compares the optimistic pronouncement of the three major regional conferences convened by Unesco in the 1960s in Addis Ababa, Karachi and Santiago de Chile with the

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[101] Ibid.
[102] P.H. Coombs: Future Critical World Issues in Education: A Provisional Report of Findings. ICED, 1981, p.7.
[103] Ibid. p.8.

actual performance of the three regions, it is evident that the target to achieve universal free and compulsory primary education for all children by 1980 is far from a reality. Very few countries have achieved universal primary education (UPE), while majority are still far behind.

Some of these countries are close to achieving UPE. For example in the Asian region: in Bangladesh in 1978, 75% of the primary school age population was enrolled in school.[104] In Burma enrolment was 90% in 1977-78,[105] in Indonesia a target of 85% was achieved by 1979.[106] In Iran the average enrolment at the primary level had reached 80% in 1978 with 68% of such students in rural areas and 90% in urban areas attending school.[107] In India by 1972 83% of school age cohorts were enrolled in school and the latest statistics of Unesco (1979) point out that 90% of the rural population is served by primary education (grade I to V) either nearby or within a walking distance of one kilometre.[108] This indeed is a great achievement for a country like India with the world's second largest population. UPE in African region is far behind Asia. Very few nations are close to the target with a ratio reaching 74% in Cameroon (1972), 80% in Congo (1970), 74% in Ghana (1970) and 93% in Mauritius (1970). All Latin American countries, with an exception of four, have

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[104] Unesco: Bulletin of Unesco Regional Office for Education in Asia. NO:20, 1979, p.23.
[105] Ibid. p.43.
[106] Ibid. p.73.
[107] Ibid. p.86.
[108] Ibid. p.71.

primary enrolments ranging between 80-99%.[109]

Even though these countries are close to achieving UPE, they have a long way to go to achieve the goal set at the regional conferences of Addis Ababa, Karachi and Santiago. This shortfall is due to the fact that in many of these countries education is now being provided in remote and less developed regions of the country which face certain problems. The Unesco regional office of Asia reports that:

> The traditional pattern of educational expansion typically runs into barriers when it has reached 50-60% enrolment ratio. Further expansion, which means expansion into remote areas or to deprived sections of the population becomes slower and more difficult to implement.[110]

The difficulty may be often due to the lack of qualified personnel to teach in these less developed and more remote areas. It is usually difficult to convince teachers to accept positions in such remote places. So, education in remote and less developed rural areas of the Third World is still at a low level and shows little prospects of improving.

Although enrolment in the countries mentioned earlier have increased, yet there are several least developed nations where enrolment ratio is below 50%. Most of these countries are in Africa and have enrolment ratios as low as 17% in Ethiopia (1973), 18% in Mali (1972), 15% in Mauritania (1970), 13% in Somalia (1973), 10% in Upper Volta

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[109] World Bank: Education Sector Working Paper. 1974, Table 3, pp.18-19.

[110] Unesco: Bulletin on Education in Asia. No:14, 1973.

(1972). In Latin America the lowest enrolment is 43% in El-Salvador (1971). In the Asian region, enrolment is 24% in Oman (1972), 48% in Pakistan (1972), 12% in Yemen (1972)[111] Of these three regions, enrolment in Africa is the least. One reason could be the poor educational position most African countries were in, at the time of their independence (which they acquired in 1960s). In 1950 African primary schools had 18% of the population aged 5 to 14 enrolled as compared with 24% in Asia and 38% in Latin America.[112] A Unesco publication on education in black independent Africa is quoted by Walter Rodney who stated that:

> "Of the population (of around 170 million), a little more than 25 million are of school age and of these nearly 13 million have no opportunity of going to school and of the 'privileged' 12 million less than half completed their primary education."[113]

At the time of independence, most African states had limited educational provision available to children, therefore, in spite of their rapid enrolment rate, they are now far behind the Asian and Latin American regions. On the whole, 25% of the poorest countries have only one third of their primary school-age children enrolled and on the average in the LDCs more than one fourth of the appropriate primary age group does not attend school. Therefore, an overall UPE in the underdeveloped world as of 1970 was only 48% in Africa, 58%

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[111] World Bank: op.cit. Table 3.

[112] Herbert More Phillips: Basic Education: A World Challenge. London: John Willey and Sons, 1975, p.39.

[113] Walter Rodney: How Europe Underdeveloped Africa. London: Bogle-L' Ouverture Publications, 1972, p.169.

in Asia and 78% in Latin America.[114] This means that half of the children in developing countries had no opportunity of schooling.

Based on the most recent enrolment and population trend, The Unesco has estimated an expansion of the existing primary education systems in the developing world for the period up to 1985. The projections show an increase in enrolment from 300 million in 1975 to 350 million by 1985 while during the same period the school age population will increase from 630 to 725 million. This means that there will be a parallel increase of 'out of school' children from 330 million in 1975 to 375 million in 1985.[115] This indicates that more than half of the school age children will be 'out of school' by 1985.[116] In view of such a predicament, the conclusion of the Unesco study of 1974 was that:

> There is little evidence that South Asia and Africa will succeed doing more than maintain the present relative level of provision in response to the increasing numbers seeking admission to education. The prospects are somewhat brighter in Latin America.....By 1985 the less developed regions as a whole will only be slightly near universal education for children aged 6-11 than they were in 1970. To reach universal education for this age group say by 1985 would require that the less developed regions treble their average annual enrolment existing in the 1960s."[117]

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[114] H.M. Phillips: Basic Education: A World Challenge. 1975, p.31. Table 3.4.

[115] World Bank: op.cit. 1974. see Table, 5.

[116] 'Out of school' is described as children who would either never attend school because of lack of school places or because their parents - particularly in the case of girls - do not send them to school or who become enrolled, but drop out before completing the primary education.

[117] Quoted in H.M. Phillips: op.cit. 1975, p.34.

If UPE is to be achieved, then educational expenditure at the primary level has to be increased much faster than it has already done. This is unlikely to happen, because not only do the educational systems have to compete with other sectors of the economy for funds, but within the system itself, primary level has to compete with the secondary and tertiary levels of education. Political pressure from the high income parents to expand the secondary and tertiary education being great, a disproportionate share of the educational budget will continue to be devoted towards levels other than the primary. So achievement of UPE will most likely be postponed.

From the increased ratio of enrolment at the higher level shown in table I earlier, it is evident that there has been an enormous pressure from well-to-do segment of the population that resides in urban sector, to expand higher education which is the main avenue to high wages and pestigious jobs. The expansion does not benefit very much the population in rural sector, especially the poor, because rural areas are often served with primary schools (in most cases incomplete); a few secondary schools and almost no higher education facilities. Since majority of the population resides in rural areas, about 70-90% of the poor have little chance of completing primary school and often much less chance of seeking secondary and tertiary education. Out of the successful primary school graduates, only a small percentage gets access to secondary education.

It is only the well-to-do from the rural sector that can afford higher education which they obtain by migrating to urban centres. Therefore, the expansion of secondary and tertiary education benefits those in the urban and the rich from the rural areas thus widening the disparity of educational opportunity.

3.1.2 Rising Educational Expenditure and Limited Resources

In order to meet the expanded levels of educational enrolments, most Third World countries have increased considerably the proportion of both the national budget and national income that was spent on education. Typically, educational expenditures rose from 2% of the GNP in 1950s to 4% in 1970s, and from less than 10% of the total public spending then to over 20% currently. However, there are variations in expenditures ranging from a minimum of 1% GNP as in the Yeman Arab Republic and 3% of public expenditure as in Oman to a maximum of 9% GNP in Algeria and 32% of public expenditure in Mali.[118]

The increase in expenditure on education accruing since the 1950s is enormous. Harbison and his associates have pointed out that during the period from 1960 to 1965, the annual increase in educational expenditure in some countries was 25% as in Argentina, 21% in Sudan, 24% in Mexico, 34% in

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[118] World Bank: op.cit. 1974, Table 3. pp.18-19.

Uruguay, 35% in Colombia and as high as 63% in Ghana[119] and in most cases increase in expenditure on education exceeded the increase in per capita GNP. The ratio of expansion of educational expenditure to increase in per capita GNP was found to be relatively high for African and Latin American countries (between 5:1 & 6:1) respectively.[120]

A great many Third World countries now spend more than 5% of the GNP on education. For example during 1971-74 the percentage of GNP spent on education in African nations was 6.2% in Zambia, 6.7% in Ivory Coast, 7.5% in the Republic of Congo and 9% in Algeria. In Asian region, Jordan spent 7% and Iraq 6.7% while in Latin America 5.2% was spent in Costa Rica, 5.8% in Guyana and 5.1% in Trinidad.[121]

A look at the share of total public expenditure devoted to education gives a similar picture. The average figure is about 18%, but over a dozen countries spend as high as 25% of their budget on education. Percentage of the total public expenditure allocated to education at all levels during 1971-74 was as high as 26.6% in Mauritania, 28.3% in Dahomey, 30% in Iraq, 27.6% in Upper Volta, 27.6% in El-Salvador, 29.8% in Algeria and 32.3% in Mali.[122]

Although an acceptable percentage of the public expenditure will differ from country to country, it is

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[119] See F.H. Harbison, J. Maruhnic and J.R. Resnick: Quantitative Analyses of Modernization and Development. Princeton, 1970, chapter vii pp 65-68 and appendix vii.
[120] Ibid. p.67.
[121] H.M. Phillips: op.cit. 1975, Appendix I pp.241-252.
[122] Ibid.

observed that any proportion much above 20% begins to impinge upon the needs of other sectors and services such as housing and health, agriculture and industry, social, police and military services etc. These competing sectors limit further escalation in educational expenditure in relation to the rate of growth of GNP and increase in public revenue. All developing countries have almost reached a financial break point as far as educational expenditure is concerned.[123] Even with a heavy drain of resources into education, many LDCs are, as has been pointed out, far from achieving UPE - the common goal across countries. In countries like Ethiopia, Upper Volta and Mali, which spend heavily on education, the situation is pathetic.

Joseph Ki-Zebro presents the case of Upper Volta, where more than 1.5 million dollars of a 10 million dollar budget is spent on education. This, he asserts, is the expenditure to educate only 9-10% of the school age population. In order to educate the entire population, Joseph ki-Zebro concedes that it would need several times the national budget, which is impossible especially in a country, where the Gross Domestic Product (GDP) does not grow more than 1.6%

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[123] See H. Hultin and J. Pierre J.: Costing and Financing Education in LDCs: Current Issues. World Bank Staff Working Paper No. 216, 1975. Presenting a theroretical case of a country (Independencia) that is affected by the problems of rapidly rising enrolment and unit costs, this paper highlights the impossibilities of continuing upward trends of educational costs.

annually.[124]

The propensity of developing countries to invest heavily in education in many respects is laudable, for it indicates an awareness of the importance of developing the capacities of people. But on examining the mechanism of allocating increased financial resources to education, one finds a disproportionate share of public expenditure going to higher levels of education. John Simmons quotes data from the Unesco statistical year book 1975, which shows that while 76.5% of the total school enrolment in the developing countries was in the primary school, it received 48% of the budget while 17% of the budget was spent on 2.8% students in higher education.[125] A greater proportion of the budget is allocated to higher education, because in the LDCs, per pupil expenditure in higher education is usually very high compared with those of primary. While the cost of educating one university graduate in the U.S.S.R.; U.S.A. and U.K. was respectively one and a half times; three times; and ten times the cost of educating one primary school student, in LDCs it cost as high as 283 times the cost of educating one primary school student in 1970.[126]

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[124] Joseph Ki-Zebro: "Education and Development". in F. Champion Ward (ed): Education and Development Reconsidered: The Bellagio Conference Papers. New York: Praeger Pub. 1975, p.96.

[125] John Simmons (ed): The Education Dilemma: Policy Issues for Developing Countries in the 1980s. Oxford: Pergamon Press 1980, Table 2.

[126] F.H. Harbison: Human Resources as the Wealth of Nations. Oxford: University Press, 1973, Table III.

Harbison presents data from the developed and developing countries which showed the ratio of per pupil expenditure at primary and higher level. The data indicates that for four African less developed commonwealth countries - Tanzania, Kenya, Malawi and Sierra Leone - per pupil expenditure ratio between primary and higher education ranges from 1:122 to 1:283. This means that with the cost needed for educating one university graduate, nearly 283 primary school students can be educated in Sierra Leone.[127] Such a heavy expenditure in higher education in LDCs devoted to a small minority of students[128] certainly affects their rates of progress towards universal primary education.

Caught in between the rising demand and limited resources, Third World countries have spread their available resources thinner and thinner to absorb more and more students especially in the primary school. This policy resulted in a decline in the quality of education, which also accounted for high rates of dropouts and repeaters; thus creating an enormous educational wastage.

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[127] Ibid.

[128] Harbison and his associates present data on educational ratio calculated for average duration of schooling at each level of education for the relevant age group 5-14 years (first level), 15-19 years (second level) and 20-24 years (third level). The data shows that at the third level, enrolment ratio mean ranges from 0.3 in the Level I Countries (LDCs), 2.3 in Level II Countries (parially developed) and 6.5 in Level III Countries (semi-advanced). The countries are ranked I, II & III by composite index. All the three levels constitute the Third World. The average enrolment ratio at the third level i.e. the tertiary level in the developing countries can therefore be calculated as 3.1. see Appendix vi, Table vi.4, vi.6, & vi.8 in Harbison, Maruhnic & Resnick: op.cit. 1970.

3.1.3 Wastage in Education: High Rates of Dropouts and Repeaters

Social returns on education have not been very impressive, because much of what is spent is wasted. Wastage in LDCs resulting from high rates of dropouts[129] and repeaters have become frustrating. Most LDCs do not have a system of automatic promotion from one grade level to another, therefore; dropouts tend to be greater in number, especially at the primary level (see Table II).

Table II

Wastage in the Primary and Secondary School around 1960s.

Developing Region	Primary Cycle		Secondary Cycle I Cycle		Secondary Cycle II Cycle	
	Dr.O.	Rep.	Dr.O.	Rep.	Dr.O.	Rep.
Africa	54.0	40.7	30.8	26.5	41.9	24.2
L.America	61.6	5.3	33.6	9.4	18.5	3.5
Asia	20.2	10.3	11.8	20.7	18.1	37.7

Source: International Bureau of Education: "A Statistical Study of Wastage at School". Paris: Unesco, 1972, p.20. in J. Simmons (ed): The Education Dilemma. 1980, Table 7 and 8 p.46.
Note: Dr.O.=dropout percentage, Rep.=repeater percentage.

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[129] School dropouts are those who (i) voluntarily leave school before completing the course, because of socio-economic conditions. They could preferably be called 'pull outs' and (ii) those who are compelled to leave school because of their poor performance. Such dropouts are referred by some as 'push outs' or 'kick outs'. However, this distinction is not made in the data available in the literature. The children who leave school on their own volition and those pushed out as a result of school action are referred to as 'dropouts'.

Table II shows that dropout rates in primary and secondary school in the regions of Africa and Latin America are higher than Asia. This is because of an automatic promotion system in countries like China, Korea and Malaysia[130] which raise the mean level of dropout. Repetition rates are higher in Africa and Asia. While they increase in Asia from 10.3% in primary to 20.7% and 37.7% in the I and II cycle of secondary school respectively, in Africa a decrease is noted from 40.7% in the primary to 26.5% and 24.2% in the I and II cycle of secondary level respectively.

This is an overview in the three regions, but figures of some of the countries show a severe wastage. For example in India and Pakistan, the greatest dropout rate is between grades I and II. For every 100 children who enter grade I at the age of 5 or 6, only 50 enroll at the begining of the next year. Subsequently the rate of dropout is less extreme, but on an average only 20 pupils remain in grade five.[131] Dropout rates have not decreased much over the years. For example in Bangladesh, recent data shows that 75% of those who enrolled in primary school dropped out before reaching grade V and 58% immediately after the first year.[132] This indicates that only 25% graduate from primary school.

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[130] M.A. Brimmer and L. Pauli: Wastage in Education: A World Problem. Paris: IBE. 1971, p.42.

[131] Adam Curle: Educational Problems of Developing Societies. New York: Praeger Publishers, 1973, p.51.

[132] Unesco: Bulletin on Education in Asia. No: 20. 1979, p.24.

The situation in French speaking Africa is even worse, where less than 10% successfully graduated from primary school in 1960s. Out of every 1000 enrolled in grade I, the number that graduated was 64 in Cameroon and Chad, 67 in Dahomey, 91 in Congo, 95 in Ivory Coast, 96 in Madagascar, 129 in Niger and 156 in Mauritania.[133] A study by Brimmer and Pauli showed that in Latin America during the 1950s and early 1960s dropout rates were so high that in general, only a quarter of the children enrolled, reached grade VI.[134]

While an overall dropout rate in the developing countries is high, the situation in rural areas is worse than in urban areas. In rural Gautemala, only 35 out of 1000 primary school entrants completed the six year cycle of education, even after repeating grades 4 to 5 times.[135] Over 90% of the dropouts leave school before completing the third year. Francis J. Method claims that it would require an investment of some 70 instructional years to provide one successful 6 year leaver.[136] The number of students that successfully complete their primary school education is ten times larger in urban than in rural schools in Columbia.[137] While data regarding rural/urban and male/female dropout is very limited, Brimmer and Pauli provide a complete data of Algeria (late 60s) where out of 1000 pupils enrolled, 570

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[133] See P.H. Coombs: op. cit. 1968, Appendix 9. p.191.
[134] Brimmer and Pauli: op.cit. p.43.
[135] Frances J. Method: "National Research and Development Capacities in Education". in Champion Ward: Education and Development Reconsidered. 1975, p.135.
[136] Ibid.
[137] World Bank: op cit. 1974, p.15.

dropped out at the end of primary schooling in urban areas as against 690 in rural areas. Also the figures for girls in rural areas indicate a much higher wastage rate amongst them than their counterparts in urban areas. Out of 1000 girls enrolled in the rural areas 354 dropped out before completing primary school education as against 96 in urban sector.[138]

Due to a greater number of dropouts and repeaters, the overall retention (i.e. completing of course) rates in developing countries was found to be 47%, with the lowest retention rates in Latin America which was 34% approximately. Tentative rates in Africa is 66%, and in Asia it ranges from 95% in East Asia to 44% in South Asia.[139]

It has been noted earlier that increases in school enrolment has been accompanied by increased total expenditure on education with rising unit cost. But part of the increase in unit cost of education results not from improvement or expansion of education, but rather from a wastage on account of repetition of grades and of premature school leaving. The effect of this is that the number of pupil years required for a given group of children to complete a cycle of education is considerably higher than the optimum time that would be required if there were no wastage.

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[138] See Table 5 and 6 in M.A. Brimmer and L. Pauli: op.cit p.52.

[139] See John Simmons (ed): The Education Dilemma. op.cit. 1980, Table 9, p.47.

In the final report of the "Technical Seminar on Education Wastage and School Dropout", it was estimated that dropout and repetition was costing the 17 Asian countries represented in the Karachi Plan, a minimum of about $100 million dollars annually.[140] The magnitude of the problem vary from country to country ranging from 18% to 25% of the budget being wasted.

· For Latin America in 1960 it was estimated that the total expenditure on education at all levels was $1,584 million and 75% of this amount i.e. $1,140 million was expended on pupils who did not complete the cycle of education they embarked upon.[141] This is seriously wasteful, not only of the limited financial resouces, but of the human resources as well. When primary school children leave before completing three or four years of education, they will be unable to achieve permanent literacy. Therefore, money spent on them will largely be wasted. This great number adds up with those who have no access to any kind of education, thereby swelling the population of adult illiterates. High illiteracy is evident from the fact that in developing countries, even though the ratio of illiterates decreased from 59% to 50% from 1960 to 1970, the absolute numbers have increased from 701 million in 1960 to 756 million in 1970 and by 1985 it is estimated to increase to about 850 million. This increase is partly due to the parallel

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[140] M.A. Brimmer and L. Pauli: op.cit. p.45.
[141] Ibid.

population explosion. The point is that these high rates of increase in enrolment and expenditure in LDCs have not even been able to make their soicieties literate.

Causes of Wastage: The causes of this enormous wastage of the human and the financial resourses are (i)internal: this relates to the inadequacy of internal resource of the educational system such as content, organization, structure and the treatment of students by teachers (already discussed earlier in chapter 2); and (ii)an impact of the external factors such as political, social, economic and cultural.[142]

Of the external factors causing dropouts and repetition of grades, the recognizable cause of all is the relative poverty which brings with it malnutrition, undernourishment, inadequate housing, child labour and all that entails. It is because of their low socio-economic conditions children in the developing countries, especially those in rural areas have to share family responsibility like running errands, tending animals, working in fields, taking care of siblings etc. Poor families often need the labor of even young children for financial support. Even if children's labour is not needed, many may still be forced to drop out because they are unable to afford the educational expenses which most of the so called free schooling entails, for example:

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[142] For a review of the literature see: Russel Beirm, David Kinsay & Noel McGinn: Causes and Consequences of Early School Leaving. Cambridge, Mass.: Harvard University Graduate School of Educaion, 1972, and chapters 5 & 6 in M.A. Brimmer & L. Pauli: op.cit. 1971.

uniform, books, stationary, examination fee etc. Also parents who see their children experiencing repeated failure often withdraw their children and send them to work. Some parents are even reluctant to send their children to school especially in the case of girls in traditional societies, where girls are married at an early age. So girls usually drop out earlier.

3.1.4 Qualitative Aspects of Education - Perpetuation of Outmoded and Irrelevant Curriculum

Not only do external factors affect wastage, but the type of education given which is irrelevant to the needs of people, and also the atmosphere of school itself contribute to repetition and dropout. The contemporary crisis in education in developing countries is not only quantitative, but also qualitative. In order to meet the increasing popular demand for education, Third World countries have expanded their education system rapidly. Even though the resources available were increased, they were often insufficient to improve or maintain the quality of education provided. Complaints are usually heard that the quality has deteriorated, because the limited resources had to be spread thinner and thinner over more and more students. The objective of school expansion, especially at the primary level, has been, a mere increase in the number of school places available. The result is that primary school children particularly those in the rural areas have a tough and

unpleasant time at school. Nicholas Bennett portrays a picture of the primary school experience of a typical rural child in a Third World country, noting that:

> "Typically, at the age of 5, 6 or 7 (legal age) the child will enroll in a primary school. It is likely that this school will be some distance from his home and that he will spend about seven hours in school, most of the time sitting in a crowded hot, ill-lit building. He will be taught by a teacher without much more than primary school education himself. At least half of the time will be spent on reading (reciting after the teacher), writing (copying from the board) and arithmetic (copying and reciting). In many countries a language used is other than the mother tongue. There might also be some work on a school garden, and lectures and recitation in geography, history and general science."[143]

The two major problems raised here are - building facilities and teachers. With respect to the physical environment, the provision of adequate facilities[144] in rural areas is nearly an insurmountable problem. And this has been projected as a main obstacle to the achievement of UPE by 1980 by the member countries in the Karachi Plan.[145] Developing countries were left with two alternatives: either to expand the system irrespective of its quality or to maintain the quality and limit, its access to the majority of children. From the situation which exists in most developing countries, it appears that the educational planners favoured

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[143] Nicholas Bennett: "Primary Education in Rural Communities - Investment in Ignorance?" Journal of Development Studies, 6:4, July, 1970, pp.93-94.

[144] Adequate facilities include proper school building with good sanitation, drinking water, stocked library, science equipment, other teaching aids etc. which make school appealing and comfortable.

[145] See Report of Meeting of Ministers of Education of Asian Member States Participating in Karachi Plan. Unesco: Tokyo, 1962, pp.4-12.

the first option which seemed reasonable to them to achieve the goal of the conference and at the same time to meet the demands of people. The result was that developing countries tended to provide poor facilities for larger proportion of the population instead of providing fewer but qualitatively more substantial schools. In some countries like India many educationists and lay dabblers considering buildings to be unneccesary, advocated open-air-school (under trees) for villages.[146] There, the building problem is presently handled by providing double shift in school i.e. one in the morning and one in the evening.

One important factor restricting the expansion of physical facilities is the high proportion of primary school budget spent on teacher's salaries, which amounts to as much as 90% in India (1965) and 97% in Khemer Republic (1976). In the Asian region as a whole, 90% of the expenditure is on salaries. Such a heavy proportion allocated to personnel, leaves only a small proportion for other facilities such as teaching aids, materials, school buildings etc.

Another important issue pertains to the quality of teachers. This problem is one of the major weaknesses of the educational system, especially at the primary level in rural areas. The quality of teaching is partly affected by the quality of teachers. Education in Coombs' words, is a "mass production labor intensive industry" dependent upon its

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[146] T.W.G. Miller (ed): Education in South and South East Asia. 1968, p.90.

ability to consume its products. The product of the industry can only be as good as the system which produces it. A poor system will recycle its poor quality products. Since education is a big industry, it needs large number of teachers, and therefore must win back enough of its best quality products as teachers. But it often gets high proportion of "second" choice candidates, because the best products get absorbed by the modern industrial sector, which offers attractive wages. Some accept the teaching profession as a "stop gap" measure, and as opportunities arise, they move on to other careers. Those who get stuck with this profession either willingly or unwillingly, are often reluctant to accept positions in rural areas, due to the lack of attractiveness, the indequate facilities and the lack of social benefits and prestige in these areas. So, in many instances those educated in rural areas end up teaching in rural schools.

At the primary level it is repeatedly reported that numerous teachers in most LDCs possess inadequate qualifications - whether in the form of initial academic qualifications or additional qualifications presumably acquired by certain training. In many instances primary school teachers have only an elementary school education or little more. The Unesco reports that in Laos over 70% of teachers had less than ten years of schooling. The situation of Kenya in 1965 was similar. Secondary schools also have a similar staffing problem especially where science teaching

is concerned. Qubain points out that:

> "....in every Arab country, without exception, there is today a severe shortage of qualified science and mathematics teachers. Thus, almost all the governments are forced to hire teachers with rather dubious academic standards."[147]

A Similar problem confronts India and most other Asian countries. About this issue Cerych writes that:

> "More than 50% of secondary teachers have no university degree, and among the graduates 2% only have first class degrees, while 85% have third class - the lowest awarded."[148]

Therefore, teachers in most parts are undereducated, undertrained and often underpaid and most of all they are undervalued. Shortage of teachers has increased teacher pupil ratio and as a consequence, we find over crowded classrooms. In African countries shortage of teachers is met by the appointment of expatriate staff. Since many African countries are higly dependent on external aid, supply of foreign teachers is a part of that aid. In many countries shortage of teachers may not be due to the lack of qualified teachers, but possibly due to low wages. Even after receiving training for the profession, many teachers move on to other jobs. Therefore, providing training without being able to retain their services is another waste of resources devoted to education. Confronted with such problems, many schools remain supplied with low quality teachers.

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[147] Fahim Issa Qubain: Education and Science in the Arab World. Baltimore: John Hopkins Press, 1966, pp.17-18.

[148] L. Cerych: Problem of Aid in Education in Developing Countries. New York: Preager Publishers, 1965, p.46.

Here it is necessary to recall the views of Jencks, Coleman and others who argued that school variables are not the most likely sources of influence on academic achievement. Schools in developing countries are not like those in the industrial societies. In the economically less developed countries, investment in school teachers and school equipment seem to have a greater affect on achievement.[149] Heyneman's findings suggest that investment in such areas as better teachers, physical equipment, and learning materials - the basic components of school quality - can be expected to affect the academic performance of school children in poor countries at a magnitude three to four times greater than a similar investment made in industrial countries. A similar conclusion is drawn by Farrell who indicated that in-school factors rather than personal characteristics of Chilean primary students accounted for the majority of varience of achievements.[150] Therefore, Jencks findings cannot be generalised to the Third World countries. However, there might be exceptions.

Obselete and Irrelevant Curriculum: An important aspect of the quality of education is the relevance of what is taught

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[149] See Stephen P. Heyneman: "A Brief Note on the relationship Between Socio-economic Status and Test Performance Among Ugandan School Children". Comparative Education Review, Vol. 20, No.1, Feb., 1976, pp.42-47.

[150] Joseph P. Farrell: "Factors Influencing Academic Performance Among Primary Students". 1973, quoted in T.J. La Belle & R.E. Verhine: "Nonformal Education and Occupational Stratification: Implications for Latin America". Harvard Educational Review, 45:2:1975.

in schools - relevance to the child's needs as he grows up in his environment and to the needs of the community. In fact, what is obviously taught in developing countries is irrelevant to the cultural, soical and economic context of these particular countries and the students concerned. Developing countries of Africa and Asia have derived the models for their educational systems from Europe. The subject content of the syllabuses still remain urban, rather than rural in outlook, essentially literary, rather than practical. Beeby recognizes that one would have no difficulty in finding in Africa and Asia, scores of examples of curriculum and educational objectives more suited to England and France half the century ago than to the crying need of an emergent tropical country today.[151] A similar comment is made by Cerych, who writes that:

> "Whether consciously or not, the African secondary school is assigned the same social and economic function as its European model, giving preparation for higher education or for the practice of certain professions required (or formerly required) in the European background, but not filling the special economic, social and cultural needs of the African countries."[152]

Even where curriculum changes have occured thus far, these changes were really marginal. Don Adam and Robert Bjork support Beeby's assertion noting that in Africa, text books have been rewritten to incorporate African history, geography and art; and Africanization is taking place in

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[151] C.E. Beeby: The Quality of Education in Developing Countries. Cambridge, Harvard University Press, 1966, p.31.
[152] L. Cerych: op.cit. 1965, p.42.

terms of examinations and professionalism. Experiments were earlier being carried out at introducing a vocational emphasis in primary schools and even some vocational secondary schools have been created. Nevertheless, the African schools like most secular schools, emphasize the 3Rs's in the primary grades and focus essentially on academic general education in the secondary grades.[153] Primary schools everywhere are often viewed as institutions for teaching 3R's with a smattering of information on various subjects. None of the subjects relate to the environment in which the child lives and even if related, does not provide any opportunity for practical application. Therefore, it has little value except for those few who have a chance to continue secondary schooling. Qubain[154] points out that in spite of the elementary school curriculum in many Arab countries being considerably modified, it continues to be in large measures, non-functional and divorced from life environment of students.

Not only is primary education irrelevant, but very few obtain functional mastery of reading, writing and arithmetic, the 3R's. Many may not attain the minimum levels of achievement in the development of such cognitive skills like newspaper reading for these skills to have economic utility. Those who do not continue beyond the primary level and those who leave prematurely, are more likely to lose the

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[153] Don Adam and Robert M. Bjork: Education in Developing Areas. New York: David McKay, 1972, p.73.
[154] F.I. Qubain: op.cit. 1966, p.10.

rudimentary reading skills, partly because of poor grounding, and partly due to the lack of reinforcement in their every day life after they leave school. With regard to the secondary curriculum (loaded with content pertaining to science and technology) Qubain further notes:

> "......... by the time an Arab student graduates from secondary school he has received more theoretical science instruction and is probably somewhat more advanced in this respect than his counterpart in the U.S. On the other hand, he is apt to be less able to think for himself and to make use of this knowledge."[155]

As to science instruction at the grammar school in Nigeria, Ukeji observed that:

> "The products of grammar school may be proficient in academic knowledge but generally lack real understanding and ability to reflect, to interpret, to discover and to adopt..... Arthur Bester complains of academic courses which teach men to manipulate laboratory apparatus, but not to think scientifically, to carry out intricate computation but not to think mathematically, to summarise philosophical arguments but not to think critically."[156]

What then becomes evident is that even if the curriculum is made scientific, it is still theoretical and each level of education is preparatory to the next level. There is a lack of integration between schooling and working life. Enough skill courses are not included, and even when included they are theoretical providing little opportunity to gain practical experience. The often urban oriented curriculum tends to alienate students from the world of work and

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[155] Ibid. p.17.

[156] B. Ukeji: "Education for Social Reconstruction". Lagos: Macmillan and Co., 1966, p.6.

produces attitudes which favour white collar occupations; thus raising their aspirations for modern sector jobs which many may not be able to acquire. These increased aspirations for modern sector jobs open up an important problem which the developing world is facing i.e. the problem of unemployment.

3.1.5 Problem of Unemployment among Educated

Another serious problem prevalent in the Third World is of unemployment with its concentration among the young and educated constituting almost one third of the unemployed labour force. It is hard to find any LDC which is not experiencing difficulty in providing enough jobs of the kind to which their formal education has led them to aspire and expect. Unemployment is found at every level of education. In different countries the problem group is found in different level. In Asia, usually university and secondary school leavers constitute the problem group[157] with a similar situation found in Latin America.[158] In Africa, the heavy concentration of unemployed is found among those who leave primary school (this was the group which essentially filled up the clerical jobs in the colonial period).

It is often seen that employment opportunities have either remained stagnant or even deteriorated. For example,

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[157] Richard Jolly et al. (ed): Third World Employment: Problems and Strategy. Sellected Readings. England: Penguin Educaion 1973, p.170.
[158] P.H. Coombs: op.cit. 1968, p.85.

in Latin America the trends of unemployment rates have been increasing from 5.6% in 1950 to 11.1% in 1965.[159] Similar rates of unemployment persist in Colombia where it is 13.6%, in Venezuela it is 7.9%, Malaysia 9.8%, the Phillipines 11.6%, Ghana 11.6%, Kenya 14.9% and Srilanka 15%. In Chile 8% unemployment in 1960 rose to 20% in 1976.[160]

An exhaustive review of evidence on unemployment is documented by Turnham, who provides data on the extent of open unemployment (persons without job and seeking it) in more than twenty LDCs. The evidence reveal high ratio of unemploment among the educated. Illustrative comparison of the pattern of unemployment by level of education shows considerable difference in their rates. In general, rates of unemployment are found relatively low among highly educated, while among the middle group - primary and secondary school leavers - unemployment rates are the highest.[161] Though this is a general picture of unemployment in the underdeveloped world, yet a few examples can be cited to explain the magnitude of this problem in different countries.

In the Phillipines as far back as 1961, fewer than a quarter of all the high school graduates in the age group under 35 had full-time jobs; another 44% were seeking job;

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[159] Martin Carnoy: "Can Education Alone Solve the Problem of Unemployment?" in J. Simmons (ed) The Education Dilemma. Table 20.

[160] M. Carnoy: Education and Employment: A Critical Appraisal. Paris: Unesco, IIEP, 1977, p.13.

[161] D. Turnham: "Empirical Evidence of Open Unemployment in Developing Countries". in Richard Jolly et al. (ed): op.cit. 1973, p.47.

the rest had stepped out of the labour market. Although university graduates were doing relatively well, yet only two-thirds of them had full-time jobs, while over one in four were either unemployed and seeking jobs or had only part-time job.[162] Blaug observed a general unemployment rate of 8% in the Phillipines in 1965, but for primary school leavers it was 55%, those leaving high school 26% and college graduates 13% and at the same time, half of all unemployed were below the age of 25 and seeking their first job.[163]

In India, between 1956 and 1962, the number of 'matriculates' (those with grade ten pass) and 'intermediates' (grade twelve) registered in employment exchange, rose from 217,000 to 644,000. Within this same period university graduates registered also increased from 27,000 to 63,000. Report of the Education Commission (1964-66) estimated a total of nearly one million educated unemployed in all categories.[164] This number, according to Huq, exceeded two million by 1972 constituting about a quarter of the total unemployment.[165] The number of unemployed has doubled among university graduates, tripled among secondary school graduates and among primary school

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[162] P.H. Coombs: op.cit. 1968, p.84.
[163] Mark Blaug: Education and the Employment Problem in Developing Countries. Geneva: ILO, 1973, p.10.
[164] P.H. Coombs: op.cit. 1968, p.85.
[165] M.S. Huq: Education, Manpower and Development in South and South East Asia. New York: Praeger Publications, 1975, p.16.

graduates it has increased four-fold in a ten year period.[166] Huq also noted that unemployment in Pakistan during 1968-69 rose from 250,000 to 300,000. Unemployment seems to be increasing everywhere. Though most of those seeking jobs, find one after a waiting period ranging from 1-5 years, however, this number gets replaced by a larger new crop emerging from the education system which adds up to the remaining unemployed.

In SriLanka in 1971, about half a million people were unemployed which accounted to over 15% of the labour force. From this, four fifths were concentrated in the age group under 25. Among the 20-24 year olds with at least 'O' level passes (ordinary level passes or General Certificate of Education Examination GCE) the unemployment rate was 55% for men and 74% for women.[167] Higher unemployment is also recorded among secondary school graduates for Iran, Argentina, Malaysia, Syria and Venezuela.[168] The picture that emerges is that the problem of unemployment is endemic in the underdeveloped countries. While the highly educated may have better prospects of finding a job than the less educated, the latter forms the problem group. This problem of unemployment is an outcome of several causes.

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[166] R.L. Irizarry: "Overeducation and Unemployment in the Third World: Paradoxes of Dependent Industrialization". Comparative Education Review, 24:3: 1980, p.341.
[167] R. Dore: The Diploma Disease: education, qualification and development. 1976, p.61.
[168] Mark Blaug: op.cit. 1973, p9.

Causes of Unemployment: Studies show that the educational system is turning out a lesser quantity of the kind of finished products needed, and too many of the kind not required; thus creating an imbalance between the skills generated by education systems and the actual needs of most developing countries. In some areas while the number of graduates surpasses the absorptive capacity of the labour market, in others, critical shortages of skills continue to create problems.

The Indian Grants Commission Report of 1974-75 indicates that half of the university students during the period noted were enrolled in Arts, Oriental Learning and Law - subjects not related to the development activities. In United Arab Republic a research study reports that in mid 1960s "about 70% of the university enrolment was in the faculty of Arts, Law and Commerce in spite of the fact that for a vast majority of these subjects there was no demand."[169] A greater percentage of higher education enrolment was found in non-technical fields in the 1960s. However, there has been a decline in enrolment in such unwanted fields towards the end of the decade, but statistics reveal that the percentage is still considerably high.[170] Harbison and Myers note that in 1962 each of the four new universities in Nigeria were opening faculties of

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[169] P.H. Coombs: op.cit. 1968, p.85.

[170] See Unesco: Higher Education International Trends 1960-70: Statistical Reports and Studies. France: Unesco, 1975.

Law in spite of the fact that at that date half of Nigeria's lawyers were in search of employment.[171]

The quest for enrolment in fields like Humanities and Liberal Arts is mainly because these fields provide relevant qualification for employment in government and similar white collar jobs in the private sector. The preference for office jobs is conditioned by the colonial heritage and by the vestige of a gentry like tradition of developing societies. The reason is that in the emergent nations (ex-colonies) following independence, the supply of educated people was meagre and the demand was great to staff new national institutions and to replace expatriates working in these countries. So some less educated people were given relatively high jobs considering their level of qualifications. However, this situation lasted for less than a decade and the prospects for people with similar level of education deteriorated rapidly.

School leavers who are eligible for service sector employment have exceeded the capacity of the developing economy to absorb them. But the parents' and students' employment aspirations are still dictated by a prestige carrying hierarchy of jobs in the past which do not fit the new need for qualified manpower. Thus too many lawyers, administrators and sometimes doctors are produced and too few agriculturists, veterinary personnel etc. Intermediate

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[171] F.H. Harbison & C.A. Myers: Education, Manpower and Economic Growth. New York: Mc-Graw Hill Co., 1964, p.85.

skills like medical technicians, nurses, agricultural assistants, the auxiliaries needed in the various fields to carry through the directives from professionals are less in supply. The necessity of such personnel to the economic needs can be speculated from their existing numbers. For example, in Kenya there was one veternarian to 70,000 units of live stock, and in Tanzania one to 170,000 in 1960s.[172] The shortage that created an imbalance between the output of sub-professionals and full-professionals in the associated fields can also be observed from the available figures. For a trained professional to be fully productive, he must be supported by sufficient paraprofessionals and technicians who can perform appropriate supporting tasks. Guy Hunter suggests that an acceptable ratio of technicians to university graduate specialists is between 3:1 and 5:1, but the investigation in many developing countries have found that this ratio is 2:1 at best and sometimes 1:2.[173] In such circumstances, full professionals end up doing tasks which sub-professionals should be doing. In Chile, in the field of health, an investigation reported that three doctors were assisted by one nurse.

Shortage of middle-level skills in some countries may be due to the lack of training institutions. However, in many countries shortage does not result from the lack of or

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[172] Sir Ronald Gould: The Role of Teachers' Organization in Assistance to Developing countries. CTF, Distribution Service, 1969, August 25, p.8.
[173] quoted in P.H. Coombs: op.cit. 1968, p.79.

insufficient training facilities, but from the wide spread discrepancy between the income incentives in various jobs. Students compete to gain the extra years of higher professional training because their resulting life earnings might thereby be increased as much as ten times. This has resulted in a surplus of engineers, scientists and high level technicians even though the enrolments in the corresponding educational and training programmes have been low. The surplus is mainly because there are not enough jobs in the modern sector which these graduates with higher qualifications aspire to obtain. The surplus is reflected in various fields.

The number of graduates in the scientific, applied scientific and technological engineering fields who are openly unemployed is also high in some countries. In India (1971) 243,111 men and women trained in these fields were unemployed, including 21,569 engineers.[174] In South Korea (1971) only 60% of the graduates of such programmes had found employment. In the province of North Sumatra in Indonesia, it was estimated that around 1970, about 60-70% of the graduates from technical institutions were unemployed due to the lack of enough industries to absorb them.[175]

There is an excess of graduates from technical programmes relative to the specific demands for personnel and to the employment opportunities in general. The chances

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[174] Kishore Gandhi: "Issues and Choices in Higher Education". 1977, p.52. in R.I. Irizarry: op.cit. p.341.
[175] M.S. Huq: op.cit. 1975, p.16.

are that too many of these well trained specialists - engineers, or agriculturists, or architects, or public health specialists - are behind the desks, administering instead of out building roads, schools, growing more food and improving public health services. Government bureaucracies set too high wages for administration in comparison with the field work. The result is that even if they find jobs relevant to their qualifications, people may not accept them if they are paid relatively less than that they would be paid for administrative jobs.

Foster's study of agricultural vocational training in Ghana showed that hardly any of its graduates could find jobs related to his field of training. Instead they got jobs as clerks.[176] The rate of mismatching of technically trained professionals in relation to their occupation is high. In Brazil, a survey in the 1960s revealed that as high as 52% of engineers were holding jobs whose occupational tasks were unrelated to their training.[177]

A serious consequence of this surplus of highly skilled manpower is the 'brain drain'. Scientists and engineers from LDCs emigrate to the developed countries for employment. In Latin America an average of 8-10% of the current stock of trained engineers emigrate to developed countries. In 1975 the United Nations Conference of Trade and Development (UNCTAD) published an analysis of economic implications of

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[176] Phillip Foster: "The Vocational School Fallacy in Development". quoted in R.I. Irizarry: op.cit.
[177] R.I. Irizarry: op.cit. 1980.

the flow of skilled labour from developing countries to the USA, UK, and Canada. For the years 1961-1972 inclusive, 230,829 skilled migrants came to these nations from the LDCs. This represented 31% of all skilled migrants to these countries and 59% in the case of the US.[178] Over half of these immigrants were engineers, scientists, physicians, surgeons and dentists. Countries like India, which sorely need paramedics and technicians are exporting doctors and engineers from institutes of medical science and technology which consume greater percentage of countries' resources. J.H. Eedle quotes that out of 780 nurses trained in six years in Jamiaca, 720 are supposedly now working in the United States.[179] The massive emigration of skilled manpower is due to a limited capacity of most underdeveloped countries to absorb the increasing number of graduates, who turn out to be either highly specialized or too highly trained for the requirements of occupations in the economy. Secondly, the private rate of return is much higher to an individual in terms of employment in developed countries.[180]

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[178] Richard Devon: "Education and Development of Underdevelopment". Comparative and International Education Society News Letter, No:47, April 1978, p.6.

[179] J. H. Eedle: "The Education Spiral: Education and Employment in the Commonwealth". Comparative Education, 9:3, 1973, p.144.

[180] Flow of highly skilled people to developed nations causes an enormous waste of scarce resource in LDCs, because cost incurred on persons who migrate cannot be recovered. Since external aid to LDCs goes disproportionately to higher levels of education, the 'brain drain' from these countries benifits the donars contributing to the underdevelopment of LDCs.

Job opporturnities in the wage earning sector, which is predominantly the public sector is limited and the output from schools and universities is very large. Jobs are not being created in this sector of economy at rates commensurate with the need. Authorities are often slow in taking action to influence the maximum rates of employment generation. J.H. Eedle quotes a press release from a developing commonwealth country which noted with satisfaction that a 48 million pounds telecommunications project would be needing no additional telephone operators; and in another country a 46 million pound alluminium smelter gave rise directly to fewer than 2000 jobs.[81] It appears then, that there are less chances of enough employment opportunities being created in LDCs to absorb all the educated people. The main reason is that employment is created in the modern sector which is capital intensive and needs little manpower compared to the labour intensive industry in the traditional sector that would absorb more manpower.

An important root cause of educated unemployment lies in the interaction of the traditional educational system and the wage and salary structure, because allocation of jobs and wages is mainly done by reference primarily to the formal educational qualification. Earning differentials in LDCs are excessive. In Uganda a secondary school graduate's salary in the 1960s was twenty times, and a university

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[81] J.H. Eedle: op.cit. p.143.

graduate entering civil service was receiving fifty times the per capita income. Even in India with a more egalitarian philosophy, a secondary school graduate earned five times and a college graduate twelve times the per capita income.[182] In 1973, the minimum wage in government employment in Tanzania for a labouring job in the Public Works Department was $420. This job, which Dore says, a few lucky people would get with a primary school certificate, paid about five times the estimated average income per head. Not only are the earning differentials in LDCs excessive, but also by international standards, the differences are great. For example, in the US a doctor earns five times the average income per worker, while in India he earns twenty times as much.[183] With each extra years of education, the life earnings increase, so pupils stay longer in the educational system to benefit from it in later years. Since private rates of return are higher for higher education, the lifetime incentive of getting an additional certificate in developing countries is greater. Unless the large wage differentials among occupations are reduced, unemployment among the educated may not be minimized.

The consequence of educated unemployment is an increase in demand for more and more education. When primary education becomes devalued in relation to the secondary education, then primary level education becomes a stepping

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[182] J. Simmons (ed): op.cit. 1980, Table, 3.
[183] M. Blaug: Education and the Employment Problem in the Developing Countries. 1973, p.88.

stone to secondary education. With unemployment becoming more chronic, each level of education becomes a 'stepping stone' to the next or a 'stop gap' for those who fail to get employment and also those for whom private incentive to get a job is much less. This is the group which comes from the upper and middle class which can rely on family support for economic help while looking for a job.

High level unemployment due to the surplus of educated labour, benefits employers because the wages are thereby depressed. With an increase in the supply of educated personnel, the demand for them increases and employers substitute better educated for less educated workers using qualifications as the yard stick for measuring the efficiency of an employee. As qualifications for jobs keep rising, educational devaluation takes place. A person's capacity to perform a job or to gain access to a job is therefore measured by paper qualifications, irrespective of whether such qualifications are strictly essential in a technical sense. Ronald Dore describes this phenomenon as the 'qualification escalation racket' or 'qualification inflation' and points out the paradox, that the worse the educated unemployment situation gets and the more useless educational certificates become, the stronger grows the pressure for expansion of educational facilities.[184] Yet another consequence is the increased resentment among the educated unemployed youth which sometimes become violent as

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[184] Ronald Dore: op.cit. 1976, p.4.

it did in SriLanka a decade ago. Such a situation poses a threat to the political stability of a society.

3.1.6 Rural Urban Migration

The problem of rural-urban migration is interrelated with the problems discussed earlier and is often explained in terms of an interaction between a 'push' influence from the rural environment and a 'pull' effect from the urban environment. Though various factors influence this interaction, education is one important constituent which exerts a 'push' effect from the rural sector while employment opportunities available in the modern sector for the more educated, creates a 'pull' effect. Hence the relationship between education and rural-urban migration is strong. In a way quantitative expansion of education in developing countries has increased rural-urban migration.

In most developing countries, as Callaway[185] speculated, of every 1000 who reach a standard of permanent literacy in primary school, only 10-20% go to the secondary school, so at the end of the primary stage, 800-900 seek work. Those who come from rural areas and farming families, often reject their parents' occupation, because the education they receive being urban-oriented, encourages them to move to the urban centres. They feel that their schooling has made them fit for tasks with better prospects than

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[185] Archibald Callaway: Educational Planning and the Unemployed Youth. Paris: IIEP., 1971, pp.15-16.

getting their hands and clothes soiled and oiled in agricultural jobs that are regarded lowly. Therefore, they view education as an escape route from manual labour, rural life and farming, and hence rural children migrate to urban areas in the hope that with persistence they will get wage paid jobs. However, they usually have no practical vocational skills to offer their employers, except the 3R's, but the desire to find a suitable job keeps them in urban areas. With limited jobs available and the competition being intense, many remain unemployed for a long period swelling the category of the educated unemployed. Most of them end up taking jobs, that require no formal education at all.

Several studies in developing countries have documented a positive correlation between an individual's level of education and his/her propensity to migrate from rural to urban areas. Michael Todaro conceded that individuals with higher levels of educational certificates are more likely to migrate than those with less education because: (a) the income disparity between what they can earn in urban areas compared to their rural opportunity cost is larger; and (b) the probability of obtaining a lucrative modern sector job is higher.[186] Todaro maintains that it is the greater probability of finding a regular good urban job which explains the continual influx of educated rural migrants, in the face of growing unemployment. The reason why the more

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[186] See M. Todaro: Internal Migration in Developing Countries. Geneva: ILO. It reviews the literature on the causes and consequences of internal migration.

educated have better chances of getting a job than the less educated is because employers tend to use credentials rather than skills to select employees.

Increasing rural-urban migration, therefore increases urban unemployment with a parallel decline in the job opportunities for those with less education. It also increases uncontrolled economic and social problems and channels the best of its rural youth into urban crime, unemployment and underemployment with a corresponding loss to the viability of the village, community and the progress of rural economy. All these problems that have resulted from educational expansion and contributing to the educational crisis are deeply rooted in the development crisis.

3.2 Crisis in Development

Third World counrtries in the past two decades of 1950s and 1960s have massively expanded their educational systems in order to achieve their national goals of social and economic development, but these efforts have in a way created more problems than they claimed to have solved. The main concept of investment in education was to accelerate an overall GNP growth which by itself would take care of other problems. What in fact has happened is that education impeded progress towards wider development goals such as reducing the gap between the rural and urban sectors and between the rich and poor. Expansion of educational

opportunities claimed to accelerate economic growth that would raise standards of living especially of the poor, generate employment opportunities for all, and encourage modern attitudes. All these claims seem to be an exaggeration on the part of formal education. Education by practising discrimination in their process of selection, promotion and future determination of careers has shown an elitist bias favouring the urban upper and middle-income groups at the expense of rural and urban poor. It thus helped in reinforcing and legitimizing inequality in social, economic and political pattern of development. Third World countries are now under severe stress from rising unemployment and underemployment, decline in real wages, growing inequalities in income and rapidly increasing members below the poverty line thus intensifying the crisis in the 1970s.

Padma Desai of the Russian Research Centre, Harvard University, maintains that after all the efforts of two decades, Third World countries with 70% of the world's population, subsists on only 20% of the world's income and even this meagre income is so maldistributed internally that the bulk of its population lives in abject poverty. Collectively, the Third World faces a situation where its per capita income is one fourteenth of that in the developed world. It produces many of the mineral and agricultural resources of the world, but barely gets enough to eat; it suffers from the worst forms of economic depression; 800

million of its total population (2,600 million) are illiterate, almost 1,000 million suffer from malnutrition and hunger, and 900 million have per capita income of less than 30 cents a day.'[187] This situation of the Third World is an outcome of the narrow concept of development related to economic growth - often externally conceived and largely inappropriate.

3.2.1 Traditional Concept of Development

In the past decades (1950-70) 'development' was conceived mainly in terms of economic growth - a narrow materialistic and urban-oriented outlook. Development in such terms meant that a country whose initial economic condition has been more or less static for a long time should be able to generate and sustain an annual increase in its gross national product (GNP) at a rate of 5 to 7 percent or more. The 1960s was declared "The First Development Decade" by the United Nations which passed a resolution that 'development' should be conceived in terms of an attainment of 6% annual target growth of GNP. Levels and rates of growth of 'real' per capita GNP (i.e. monetary growth of GNP per capita minus the rate of inflation) was used to measure the overall economic well-being of a population i.e. how much of real goods and services are available for

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[187] Padma Desai: "Third World Social Scientists in Santiago". World Development, 1:9, Sept. 1973, p.64.

consumption and investment for the average citizen.[188]

With this narrow concept of 'development', the traditional or rural sector of a country had been relegated to the sidelines in favour of the modern or urban sector. The theory was that a country needs a nerve centre - industry or urban communities - to generate goods and services as well as changing climate which would stimulate production and economic activities in the villages. Industry and urban communities were conceived to provide employment and absorb the surplus manpower from village farming communities. The concept was that as the labour force in a village decreases, those that remain in the village will then have to resort to a more efficient means of production and unit productivity will consequently increase.

Since economic development was seen in terms of the structure of production, "development strategies were focussed on rapid industrialization often at the expense of agriculture and rural development."[189] It was for this reason that investment in education, especially in the secondary and tertiary levels became an important factor to produce high and middle level manpower with knowledge, skills and attitudes which would generate rapid expansion of the modern and largely urban sector, and thereby accelerate the rate of economic growth. Production of skilled and educated manpower with a potential to speed up productivity

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[188] Michael Todaro: Economic Development in the Third World. London: Longman, 1977, p.60.

[189] Ibid.

in the modern sector of economy was conceived as essentially economic, and therefore higher levels of education were heavily invested with scarce resources.

The use of GNP as a measure of development growth is an outcome of the policy of national development which assumed that if GNP is taken care of poverty will take care of itself, unemployment will be eliminated and income will be redistributed later through the fiscal means.[190] This "GNP trickle down" model that was dominant in the past two decades failed to have any effect on the masses of the Third World countries.

3.2.2 Outcome of Traditional Concept of Development

The experience of 1950s and 1960s opened the eyes of economists and policy-makers as to the flaw in relating development to a narrow concept of economic growth alone. The "GNP trickle down" concept came under attack because in a large number of developing countries, in spite of achieving the goal of the "First Development Decade" - 5% growth rate - the economic and social conditions of the masses have remained unchanged. The reason was that the benefits from the growth were not spread throughout the economy. The traditional sector in which 70-80 percent of the population lives was stagnating and in some cases even becoming poorer.

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[190] Mahbub ul Haq: "Employment in the 1970s: A New Perspective". in F. Champion Ward (ed): Education and Development Reconsidered. 1974, p.78.

Todaro noted that a disproportionate number of poor is located in rural areas engaged primarily in agriculture either as small farmers or low paid farm workers, and the remaining one-third is engaged partially in rural areas in petty services, and partly on the fringes and marginal areas of urban centres engaged in self employment. But on the average, about 70-80% of all the target poverty groups are located in rural areas of Africa and Asia and about 70% in Latin America.[191] While the modern urban sectors were industrializing, the unemployment of educated and skilled and unskilled members of the labour force was increasing, creating slums and shanty towns in the outskirts.

For hundreds and millions of people in Asia, Africa and Latin America, standards of living seemed to have stagnated, and in some countries of these regions, even to have declined in real terms. The difference of incomes between the rich and poor seemed to be increasing with each passing year. This led to an awareness that economic growth failed to eliminate or even reduce the wide spread poverty which is a fact of economic life of the Third World. This situation is typified by countries such as India, Mexico, the Phillipines, Brazil etc. India's example can be used here to show that the economic and social conditions of many people in the Third World have actually declined.[192]

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[191] M. Todaro: op.cit. p.108.

[192] See B. Amalendu Guha: "Social Change in Post-Independent India". Asian Profile, Vol.3, No:6, Dec. 1975, pp.593-615.

India has rich mineral, natural and other developmental resources, but either underdeveloped or improperly developed. It has tremendous manpower, which are undernourished and underutilized. It has possibilities of developing sufficient means of production, but these are insufficiently developed because of malnutrition which has been inflicted on population due to an unbalanced and inequitable distribution system. A handful of people with the vested interests and with tremendous socio-economic power (the power elite) fight to conserve the obselete exploitative social traditions against the oppressed groups, which mostly comprise the rural workers (the illiterates) who have come to accept their oppression as their fate. They are neither politically, economically nor educationally strong to fight the exploiting class.

The financial, industrial and commercial powers are integrated in a few hands (about 200 families). A few commercial and industrial belts of Calcutta, Bombay, Madras, Delhi and Kanpur etc. form the metropolitan centres while the rest of the population and the vast remaining territory constitute the gigantic periphery, dependent - politicaly, economically and socially - on the centre. Because of the integrated system of control, the economic life of the country and nerves of the territory are controlled by few, who manipulate the decision-making to function in their own interest. This power of the centre, as Amalendu noted, is as enormous as those of western multinationals. The

industrial-commercial belts which form the economic centres of the country, concentrate the whole savings of peripheries in the creation and development of the means of production.[193] Hence the peripheries remain not only peripheries, but while the centre gets much richer and stronger, the 'gap' between the centre and peripheries widens enormously.[194] Since the difference between the industrial zones and rural areas is great, the degree of exploitation and inequality can easily be imagined.

Average annual growth rate in food production in India increased from 3.3% to 6.2% between 1960-69,[195] but food shortage still existed. Food production and distribution are polarised in the hands of landlord and commercial elites. With almost monopoly power over the production and distribution, they maldistribute the benefits of growth. Indian food problem is therefore, not so acute because of shortage, but it is made accute through hoarding by the

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[193] Ibid. p.597.

[194] This whole concept of centre and periphery relationship within a country is mainly tied to the wider relationship of the metropolitan developed nations and the peripheral Third World countries. Johan Galtung explains the simultaneous development of metropolitan nations and the underdevelopment of Third World countries presenting a "theory of structural imperialism". This, he maintains, is because there is a harmony of interest between the "centre" of the metropolitan developed countries and the "centre" of peripheral developing countries. This common interest enables the exploitation of periphery in both the metropole and the peripheral nations. The disparity between the developed and developing countries is therefore not due to internal deficiencies alone, but of their respective position in the international economic structure of production and distribution.

[195] M.S. Huq: Education Manpower and Development in South and South East Asia. 1974. Table 2.2 p.29.

wholesale dealers over whom the government has no control. It is a political bureaucracy and the government is bound by obligation to the capitalist bourgeoisie. They go hand in hand contributing in every effort of maintaining the unequal distribution of economic growth.

The sufferers are usually the small landed and landless agricultural workers. They lack emoployment throughout the year and there is no alternative employment for them during off seasons. These landless agricultural workers who constituted 16.7% of the rural population in 1961, increased to 25.7% in 1971.[196] During the first development decade, the land reform in the name of distribution and redistribution of land to the landless, enabled the middle-class bourgeoisies to become medium sized landlords, because they could buy land in contrast to the landless, who did not posses the financial resources to purchase the redistributed plots.

Small agricultural holders further became victims of the 'green revolution' which necessitated the use of high yielding hybrid variety of crops that needed heavy inputs of chemical fertilizers followed by a timely application of sufficient irrigation facilities. If these pre-requisites failed to be applied, the green revolution ended in a dry revolution - without any result. As it was a high capital-intensive revolution, the high capital input needed could only be supplied by the rich landlords, state farms or

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[196] B. Amalendu: op.cit. 1977, Table, 1, p.595.

very big co-operative farms.

Since India's social structure is capitalistic in nature, only rich landowners apart from the state farms, could apply the financial, technological and technical as well as the material means to make the revolution a success, but a great majority of small and medium landowners were virtually deprived of the necessary input facilities. Thus, the so-called "green revolution" in India could not produce better socio-economic consequences in the vast Indian rural life, but on the other hand, benefitted the rich.

An analysis of the socio-economic structure of India will reveal a heavy concentration of wealth and power in the hands of the Indian elites comprising of capitalist bourgeoisie not exceeding 1% of the total population, but possessing 60% of the nation's wealth. Statistics of 1967 showed that the big and small urban elite constituting 2.3% of the urban population (98 million) increased to 2.6% of the population (109 million) by 1971. The rural elite also increased slowly from 0.3% of the rural population (401 million) to 0.4% (of 439 million) during the same period. The urban middle-class increased by 2%, while there was a set back in the comparable rural group which dropped from 12.2% to 11.9%. This shows a trend of gradual pauperization of rural middle class. Though the condition of the population below subsistence or poverty level in the urban areas improved slightly by 1.3%, it worsened in the case of vast rural masses. Population below the subsistence level in

rural areas increased from 87.5% to 87.7% of rural population.[197]

The situation of India is found elsewhere in the Third World countries where the economic inequalities have increased with the rich growing richer and the poor more deprived in a relative sense. The growth in GNP does not reflect improved living standards of the very poor and it is becoming clear that the mere fact of rapid growth does not determine the nature of its distributional benefits. There is no relationship between the GNP growth and the distribution of income. The main result of economic development has been on average to decrease both the absolute and relative incomes of the poor.

It is often noted that the 20% upper income group had more benefit from economic growth of the country than did the lowest 40%. For example Van de Laar of the World Bank noted that during 1960-70 in Brazil, income of the upper 20% increased by 8.4% while that of the lowest 40% increased by 5.2%. Similar was the case in Venezuela where the income growth of upper 20% and the lowest 40% increased by 7.9% and 3.7% respectively.[198] The ILO-sponsored study that attempted to determine the trends in absolute and relative incomes of rural poor found that the proportion of poor below the

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[197] Ibid. see Table, 3c p.601. Guha calculatd the population percentages on the basis of statistics in Demographic year book 1971, and Economic and Political Weekly, Delhi, 1967, May 27. and presented population structure in India on the basis of wealth and poverty.

[198] Aart van de Laar: World Bank and the Poor. Boston: Marinus Nijhoff Publishing, 1980, see Table, 5.4, p.114.

poverty line has increased and that the real incomes of the lowest groups has declined over time. To refer to Van de Laar again, he noted that in the Phillipines, the bottom 20% of the population experienced a decline in the real incomes while in Bangladesh over 80% of the population experienced the decline.[199] This means that there is no evidence of any automatic "trickle-down" of the benefits of economic growth to the very poor. On the contrary, economic growth led to a "trickle-up" in favour of small middle class and especially the rich. Although exceptions exist, country after country reveal the same pattern of high economic growth accompanied by ever increasing social and economic inequalities.

With an increase in GNP per capita as a measuring rod, it can be argued that most Third World countries were moving towards 'development', but development theorists began to question whether increase in per capita income meant 'real development'. A development theorist, Dudley Seers maintains that to evaluate development one should look at the people and their conditions in the country and examine what has been happening to poverty, unemployment and inequality. From what has been noted so far, it appears that even after achieving economic growth, problems have been increasing in the Third World countries. Dudley Seers maintains that if any one or two of the conditions: poverty, unemployment and inequality are getting worse, then it is in no real sense 'development' even if the per capita income increases

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[199] Ibid. p.120.

tremendously.[200] Considering Seers' assertion, it seems that most Third World countries are not developing but 'underdeveloping', because some of these countries are experiencing a high rate of growth in the per capita income but this is usually accompanied by a decline in employment, equality and lower real incomes among the poorest 40% of their population thereby increasing poverty among them.

The Extent of Poverty: Almost 40-50% of the Third World population lives in "absolute poverty". Commenting on this phenomenon, Robert McNamara, the president of the World Bank noted:

> "Some 900 million ....individuals subsist on incomes of less than $75 a year in an environment of squalor, hunger and hopelessness. They are the absolute poor, living in situations so deprived as to be below any rational definition of human decency. Absolute poverty is a condition of life so limited by illitercy, malnutrition, disease, high infant mortality, and low life expectency as to deny its victims the very potential of the genes with which they were born. Ineffect it is life at the margin of existence."[201]

The World Bank and the ILO calculated the percentage of population below the poverty line and found that it is 71% in Asia, 68% in Africa and 43% in Latin America.[202] Evidence show an increase in poverty during 1963-70 by 196 million in

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[200] Dudley Seers: "The Meaning of Development". International Development, Dec. 1969, Vol.xi No:4. in Readings in Development Volume 2. complilied by Robt D.H. Sallery et al. p.102.

[201] R.S. McNamara: Address to the Board of Governors, Sept. 1, 1975, in J. P. Grant: Disparity and Reduction Rates in social Indicators. Washington: ODC. 1978, p.3 footnote 4.

[202] See Table 5.6, in Aart van de Laar: op.cit. 1980, p.19.

Asia, 68 million in Africa and 62 million in Latin America.[203] When more than half of the population suffers and a few enjoy the luxuries of life usually at their expense, then it becomes evident that the definition of development has overlooked some of the basic needs.

3.2.3 Changing Concept of Development

Development has failed to achieve the most fundamental goal: ending human deprivation among hundreds of millions of individuals throughout the Third World countries. Increased economic development proved insufficient to bring about changes in the lives of poor. Therefore, it is essential to reconstruct development priorities away from an exclusive preoccupation with maximizing rate of GNP growth toward broader social objectives of eliminating poverty and reducing disparities.

National economic growth is now seen as necessary, but far from sufficient for a reduction of the incidence of poverty in LDCs. What developing countries need are well planned programmes for individual and national development to break away from what Myrdal calls a process of "circular and cumulative causation" or "the vicious circle of poverty" in which low incomes lead to low levels of living which keeps productivity low further perpetuating low incomes. These elements are mutually reinforcing.

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[203] See Table 5.7, in Ibid.

A new development strategy as Mahbub ul Haq, the Director of Policy Planning Department of the World Bank indicates, must reject the thesis that poverty can be attacked indirectly through the growth rates filtering down to the masses. It must be based on the premise that poverty must be attacked directly. Haq has specifically suggested that:

> the problem of development must be redefined as a selective attack on the worst forms of poverty, development goals should be expressed in terms of the progressive reduction and eventual elimination of malnutrition, disease, illiteracy, squalor, unemployment and inequalities. Social indicators must be developed and progress of people must be measured in terms of specific and quantitative goals in these fields and not in terms of average per capita income.[204]

From such a concept, it follows that priority in development strategies must be given to the improvement of people's levels of living that enable Third World countries to move away from a state of 'underdevelopment' to that of 'development'.

In addition to the material well-being of masses, the need for development of human values which were previously considered as obstacles to economic growth, are now regarded as essential by some development theorists. Denis Goulet argues that social and economic development provide the only means to achieve the good life and the good society. In his analysis of the Third World situation, he asserts that development's goals are goals of existence itself: to

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[204] Mahbub ul Haq: "Crisis in Development". World Development, Vol:1 No:7. July, 1973, p.30.

provide an opportunity for men to live fully human lives: that is development is good, if it helps individuals to live the good life.[205] Therefore, definitions of development in terms of industrialization, urbanization, modernization, growth maximization or optimization for Goulet are not very useful. The concept, Goulet asserts, must be defined normatively - development should aim at bringing about a co-ordinated series of changes in the population from being less human to more human, and generating various types of solidarities.[206]

For the elevation of an entire society and social system towards a 'better' or 'more human' life, Goulet proposes three commom core values of development - life-sustenance, self-esteem and self-freedom.[207] Using Goulet's core values of development, Todaro concludes that development is both "a physical reality and a state of mind" in which society through a combination of social, economic and institutional process, must secure the means of obtaining the three objectives of development for better life:

1. To increase availability and widen the distribution of basic life-sustaining goods such as food, shelter, health and protection.

2. To raise levels of living including in addition to

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[205] Denis Goulet: "That Third World". p.13 in Readings in Development Volume 1. compiled and edited for Canadian University Service Overseas by Robt D.H.Sallery et al.
[206] Ibid.
[207] Dennis Goulet: "The Cruel Choice: A New Concept in the Theory of Development". in M. Todaro: op.cit. 1977, p.62.

higher incomes, the provision of jobs, better education and greater attention to cultural and humanistic values, all of which will serve not only to enhance material well being but also generate greater individual and national self-esteem.

3. To expand the range of economic and soical choice to individuals and nations by freeing those from servitude and dependence, not only in relation to other peoples and nation state, but also to the forces of ignorance and human misery.[208]

Seen in a broader perspective, development strategies must involve not only a concern with accelerating economic growth, but also a direct concern with improving the material standards of living for those large segments of the Third World populations who have been largely bypassed by the economic growth of the past decades. It should awaken people's awareness by allowing them to participate in shaping their own existence, and providing opportunities to involve people in the decision-making of their own development. That is, treating people as active subjects in bringing about changes and not as passive objects to whom development strategies, pre-determined by bureaucrats are delivered. Marvin Grandstaff of the Michigan State University has identified six variables for inclusion in the 'restructured concept of development':

1. Greater effort in the 'humanitarian' or 'survival domain'.

2. A shift, on the part of developed nations, from a proactive to a reactive construction of their role.

3. The building in of measures that are specifically and deliberately geared to the more equitable distribution of wealth.

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[208] M. Todaro: op.cit. 1977, p.64.

4. An emphasis upon comprehensive and fundamental rural development.
5. Effort directed toward employment, per se, rather than just to employment as a corollary of economic growth.
6. Acceptance of some measure of decentralization of planning and decision making.[209]

To incorporate these variables within a 'restructured concept of development' and into the planning process, developing countries need an alternative system of education which is relatively low cost, short duration, need-based, employment-linked, decentralized and highly distributive in benefits to all. In response to this need, the next chapter examines the alternatives to education offered by different schools of thought and develops a rationale for one of those alternatives i.e. "nonformal education".

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[209] Marvin Grandstaff: Nonformal Education and an Expanded Conception of Development. Discussion paper 1, MSU, 1974, pp.38-39.

4. CONCEPTUALIZATION OF NONFORMAL EDUCATION

4.1 Alternatives to Formal Education

In view of the critical issues raised concerning the role of formal education in the development process, the picture that emerges is rather gloomy. The disenchantment with formal education from pedagogical, social and economic perspective has created a great concern since 1960s, especially among educators, policy-makers and political leaders, who have now begun to explore alternatives to schooling. Proposals for educational changes have come from different schools of thought.

The first and probably the most radical proposal has been put forward by the 'deschoolers'. Ivan Illich is the proponent of this view and his observations and comments have questioned the very existence of the system of formal education. He doubts the value of schools and proposed a complete and dramatic transformation of the society and the educational system - the former to be replaced by a "convival society". This, in his view would be a society, where every individual would have complete autonomy and access to facilities for growth, and to essential goods and services based on equality and justice. He also sees "production by masses" replacing "mass production" and consumerism ceasing to be the goal. Such a society, Illich believes, would be possible, if the education system that

now represses, alienates and dehumanizes the society it is supposed to serve, is replaced by self-motivated learning entered into by both, the teacher and the taught. Illich proposed what he refers to as "learning network" or "learning web" which has four components:[210]

1. Reference Services to Educational Objects which facilitate access to things or processes used for formal learning. These will provide access to libraries, museums, farms and factories.

2. Skill Exchanges which permit persons to list their skills, the conditions under which they are willing to serve as models for others who want to learn these skills and the address at which they can be reached.

3. Peer Matching: personal advertisements to attract learning patterns for mutual advantage.

4. Reference Services to Educators at large -- "educators-at-large" who may be consulted at will.

Illich's concept of education is that children will learn things in the same way that they learn to speak their own language without formal education. Since most things are learnt outside school, and what is learnt in school is soon forgotten, schooling is pointless, according to Illich. He is therefore of the opinion, that children will best learn by tapping into one of the 'learning webs'. Illich's proposals are novel and one can hardly argue with these as learning mechanisms, but the major question is, whether it is possible to do away with schooling? If his proposal is

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[210] Ivan Illich: Deschooling Society. 1971, pp.78-79.

accepted, then several questions as Blaug[211] points out, are raised. Who will administer it, supervise it and guide the learner through it? Who guarantees that the number of self-motivated learners will match the number of educators-at-large? As pointed out by Dore, curiosity and the power to perceive are trained capacities, which are not natural in all children.[212] The gifted would indeed do well, but it is the not-so-bright who would suffer. Hence what becomes of those who are not self-motivated? These questions remain unanswered in Illich's proposals. Besides these, there are other problems the learner would face.

Taking Illich's first component of the learning web, 'Reference Services to Educational Objects' one could question whether all children will have access to the 'Reference Services'. In small towns transportation facilities to those places may not be easy. Those children living far from the 'Reference Services' would then be confined to their neighbourhood and be at a disadvantage. This would then reinforce inequality between the rich and poor in a deschooled society. The idea of 'Skill Exchange' is good if discrimination of individuals based on racial feelings, colour and creed does not occur. But there is little chance that such attitudes will disappear, because the conditions under which skill exchange will proceed, will depend upon the whims and fancies of those willing to serve

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[211] Mark Blaug: Education and Employment Problem in Developing Countries. 1973, p.77.
[212] Ronald Dore: The Diploma Disease. op.cit. 1976, p.139.

as models for others. 'Peer matching' is a process of learning outside the school which has been in existence and will continue to exist whether schools are disestablished or not.

Though Illich's ideas are one of the most widely discussed educational alternatives, their provocative character and strengths convinced only a few who are experimenting with some alternatives to formal schools such as 'free schools', 'open classroom', 'alternative schools'[213] etc. operating in some of the North American cities.

A second school of thought comes from the 'structuralists', the opponents of 'deschoolers', who reject the idea of replacing the existing system by another, but nevertheless believe that profound and fundamental changes in the existing system are necessary. Schools are not isolated institutions. They are closely intervowen into the socio-economic fabric of the community subjected by social political and economic constraints. Any change in the educational system will be shaped by political and socio-economic institutions of a country. Repressive and unequal aspects of schooling derive from the need to supply the society with a labour force compatible with social relations of capitalist production. It is for this reason that education cannot bring about any significant and far

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[213] See Dwight Allen W.:"Alternative Schools and the Crisis in Education in Developed Countries". Prospects, Vol.5, No.1, 1975, pp.27-40.

reaching change towards achieving social justice in a society which is characterized by an inequitable and unjust organization of social relations in production and political power.

Even minor changes such as the replacement of academic curriculum with vocational training at the secondary level or reducing the inefficiency of schools caused by a high rate of dropout will be restricted by the power elites, because both these mechanisms tend to reinforce and legitimize the existing power structure. Therefore, meaningful strategies for educational change must explicitly embrace transformation of mechanisms of power and privilege in the economic sphere.

Neo-marxists like Bowles, Gintis and Carnoy concede that fundamental changes in the social and economic structure are a pre-requisite to any successful reform of educational system. They propose changes in the distribution of income, restructuring of jobs, the actual process of work life and the educational system. The success of educational reforms in Cuba and China have been attributed to supporting reforms which resulted from revolution that changed the fundamental social structure of these countries.

Reforms in education, however move more quickly if they are a part of an overall reform of the social and economic structure, but it does not mean that educational changes cannot be made if there are no political changes. Piecemeal changes though not as effective as desired, can be made

wherever necessary to fill in the void created by the formal education. This idea leads us to another school of thought which has gained great significance in the international organizations and in the Third World.

In Chapter 3 it was noted that attempts by many underdeveloped countries to expand enrolments cannot meet the increasing social and individual pressure for schooling. There is a prospect not only of stagnation in progress towards universal education, but as the World Bank report notes, even of a retrogression which would leave large numbers and proportions of population of many countries without even a minimum education. An estimated 800 million people whose per capita income averages less than $200 per year are likely to receive a severe set back.[214] These people belong to the least developed countries where education enrolment ratios, like other social indices are still low and where rural populations are least affected by development forces. For them the set back in education is expected to be severe. If one of the goals of development in underdeveloped countries is to make every individual literate, then where formal system cannot be extended, an alternative system may be the only means of filling the gap between the schooled and the unschooled population.

Not only is the cost of supporting the established system becoming prohibitively high, but the investment in the education of children in early primary grades, where

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[214] World Bank: Education Sector Working Paper. 1974, p.10.

dropout rates are high, will be lost unless other learning opportunities are made available to pick up where formal schools leave off. This will provide continuing education which may compensate for the loss of financial resources offering in many areas a less costly and more attainable alternative to what Coombs calls "the unfinished business of schooling."[215] Even for high school graduates who cannot go any further in education due to social, political or economic reasons, there must be stimulation to the skills and knowledge learnt in schools, which can be provided by post-school education activities. This may be one of the best ways to maximize the returns on initial investment in formal education.

There is also a growing awareness that formal education does not always provide the most suitable skills for development. Further it often has little impact on the quality of life of majority of the population who often have no choice but to seek a livelihood in rural areas. Since formal education alone cannot make rural life prosperous, some form of alternative education that can serve the identifiable needs of large groups of people beyond the reach of the established school system is essential.

Formal education tends to provide access to elite positions and power. Those who are denied educational opportunity also tend to be denied opportunity for social

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[215] P.H. Coombs: New Paths To Learning For Rural Children and Youth. 1973, p.27.

mobility, because certificates, diplomas and degrees issued by educational institutions are entry passes into the modern sector that enhances mobility in the social and economic spheres. But competence and learning are often poorly measured by mere certification, so Brembeck advocates an alternative education with the possibility of shifting attention from school certificates to performance as the criterion of achievement.[216] Harbison maintains that if achievement-oriented alternative education is provided that can shift certification to the arena of performance and as a reward for learning to do developmental tasks, then it will provide for large number of "competent" but "uncredentialed" population, a means to reform the requirement of entry[217] into the job market.

Attempts are being made by educators, planners and leaders in the Third World countries and by institutions concerned with international development and assistance, to identify the kinds of educational provision which in contrast to formal education are less expensive and better related to the immediate socio-economic problems of underdeveloped societies. And also the kinds of educational provision, which would provide a greater degree of flexibility in experimenting with new programmes. It is this

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[216] C.S. Brembeck and T.J. Thompson: New Strategies For Educational Development. Massachussets: Lexington Books, 1973, p.xv.

[217] F.H. Harbison: "Human Resources and Nonformal Education". in C.S. Brembeck and T.J. Thompson: New Strategies For Educational Development. 1973, p.7.

thought which led a number of well-known educational authorities all over the world, especially in the Third World countries to develop nonformal education as an alternative to formal system. Nonformal education that is better suited to offer more flexibility in imparting skills and knowledge, that is characterized by greater responsiveness in adjusting to changing needs and demands, especially of the rural population and hopefully providing a more equitable distribution of educational opportunity is needed. Such an education, it is felt, would provide more of a solution to some of the educational and development crisis in the Third World countries.

Emphasis on Nonformal Education: The International Labour Organization Employment Missions under the World Employment Programme have placed increasing emphasis on nonformal education[218]. One commentator who has been looking for some time into the field of nonformal education is Phillip H. Coombs, and with several associates he has been responsible for producing much of what is current in this field. Coombs[219] developed the concept of a major 'shadow system' i.e. "nonformal education sector" that exists in all countries.

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[218] See I.L.O.: Matching Employment Opportunity and Expectations: a proramme of action for Ceylon. Vol.2, 1972. I.L.O.: Employment, Incomes and Equality: a strategy for increasing productive employment in Kenya. 1972.

[219] P.H. Coombs: The World Educational Crisis: a systems analysis. Oxford: University Press, 1968.

In the case of industrialized nations, he maintains that nonformal education as "lifelong education" is important to ensure employment mobility and make "unemployable dropouts" employable, to keep well-trained people abreast of new knowledge and technologies essential to continued high productivity and to improve culturally, enriching leisure-time experiences.[220]

Developing nations lack a broad economic base and universal popular schooling, so they have different priority tasks for nonformal education. Among these are:

1. to provide new skills and knowledge to unschooled farmers, workers and small entrepreneurs;
2. to upgrade through in-service training, the competence of partially qualified people such as school teachers and others holding jobs in private and public sectors; and
3. to salvage dropouts from schools through appropriate forms of special training.[221]

Unlike the deschoolers, who have advocated stringent if not radical solutions, and the structuralists, who have proposed social transformation prior to educational changes, Phillip Coombs, Cole Brembeck and Manzoor Ahmed among others, have advocated more operationally possible modifications of traditional education. The most influential work in this field, has been undertaken by the International Council for Educational Development (ICED) under the direction of P.H.Coombs and the Institute for International Studies at The Michigan State University under the direction of Cole S.

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[220] Ibid. p.139.

[221] Ibid. pp.142-143.

Brembeck.

With substantial assistance from the World Bank and the Unicef, ICED has explored the potential role of nonformal education in rural development strategies in developing countries and undertook two major research projects in the field. The first general report to emerge from a research study commissioned by the Unicef in 1971 and carried out since then by the ICED was "New Paths to Learning For Rural Children and Youth". It was a continuation, where Coombs left off in "The World Educational Crisis". This study is heavily empirical, yet at the same time theoretically sound, rigorously analytical, and provides practical policy and operational guidelines. Observing the attrition rates, schooling costs, teacher inadequacies and other problems that are crippling the effectiveness of formal education, this report builds a case for greatly increased nonformal education offering recommendations for strengthening nonformal education opportunities for children and adolescents. However, the report makes an observation, that there can be no single universal pattern of nonformal education. Each country must make its own decisions, choices of strategy and plans of action, its own educational models, and its own futures. Outsiders can help importantly but only marginally. Third World countries, must therefore, not accept the packaged programme handed down by the international organizations, but examine and analyze its relevance to their own situation before implementing it.

"Attacking Rural Poverty"[222] a companion study to "New Paths to Learning" commissioned by the World Bank is a combined effort of Coombs and Ahmed. Going into much greater depth and detail, its focus is confined to programmes for increasing employment, productivity - in particular, programmes for farmers; craftsmen; artisans and small entrepreneurs - so as to increase income among rural adults. It is mainly concerned with a generally older age group than the study for Unicef. It provides an impressive body of evidence arguing that rural people are ill served by the conventional array of educational and rural development institutions and that both farmers and rural nonfarm people, especially women would be far better off with expanded nonformal education opportunities. This report reminds one, of the staggering problems of rural people and their learning needs.

Another important contribution is a compilation of studies by Ahmed and Coombs[223] commissioned for the World Bank. The ICED research teams gathered pertinent information on nonformal education for rural development in Latin America, Asia and Africa. Unlike some others, Coombs does not throw out formal schooling nor does he suggest radically abandoning all learning conventions and traditions. He and

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[222] P. H. Coombs and M. Ahmed: Attacking Rural Poverty: how can nonformal education help. New York: Preager Publishers, 1975.

[223] M. Ahmed and P.H. Coombs: Education For Rural Development: case studies for planners. New York: Praeger Publisher Inc., 1975.

his colleagues admit the astonishing range of nonformal education already existing in the Third World and argue mainly for its extension and for reorganizing schooling to meet the needs of the neglected.

Similar researches have been undertaken by the World Health Organization (WHO), the Food and Agriculture Organization (FAO), the International Labour Organization (ILO) and the World Education. Several American universities, including the University of Massachusetts, the University of California at Los Angeles, the Florida State University and in great significance, the Michigan State University under contracts with the Agency for International Development (AID) have engaged in research, field studies and instructional programmes to define and develop educational measures and to modernize educational approaches to take account of the new realities.[224] The Michigan State University's literature on nonformal education and development is increasing rapidly.[225] This University also conducted the first international conference and workshop on

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[224] Richard O. Niehoff: Nonformal Education and the Rural Poor. Michigan State University, 1977, p.3.

[225] Marvin Grandstaff: Nonformal Education as an Alternative to Schooling. Discussion paper No.4, Program of Studies in Nonformal Education, MSU. 1974.
---------:Nonformal Education and an Expanded Conception of Development. Discussion paper No.1, MSU, 1974.
---------:Alternatives in Education: A Summary view of Research and Analysis on the concept of Nonformal Education. MSU, 1974.
---------: Historical Perspective on Nonformal Education. MSU, 1974.
Ted W. Ward & William A Herzog J.: Effective Learning in Nonformal Education. MSU, 1974.
Kleis Russel: Case Studies in Nonformal Education. 1974.

nonformal education in April 1974 and another in September 1976 on nonformal education and rural development.[226] The conference and workshop focussed on the theme of nonformal education aimed at involving rural people in developmental process designed to help them improve their economic and social well-being. The cases reported, mostly by the practitioners deeply concerned with the basic human problems, illustrate where the critical action is in nonformal education - it is where the poor are struggling to survive. Since nonformal education has been suggested as an alternative strategy to attack the crisis in education and development in the Third World countries, it is necessary to examine the definitions and concepts which underpin the debate on nonformal education.

4.2 Concepts and Definitions of Nonformal Education

Nonformal education was advanced as a very broad and loosely defined concept like "all education that does not take place in schools" i.e. 'out-of-school' education.[227] The simple 'out of school' definition includes a huge variety of activities. Many of these out-of school activities that have been increasingly under discussion in the developing countries have been termed as 'recurrent

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[226] See Richard O. Niehoff: Nonformal Education and the Rural Poor. MSU, 1977.

[227] Marvin Grandstaff: Alternatives in Education: A Summary view of Research and Analysis on the Concept of Nonformal Education. MSU, 1974, p.6.

education', 'education permanente', 'continuing education' etc. These various activities which go by different names - such as 'on job training ', 'accelerated training', 'farmer training' and 'extension services' touch the lives of many people and when well aimed, have a high potential for contributing quickly and substantially to individual and national development.[228] More recently the discussion of 'basic education' and 'lifelong education' have been added to the fray. These diversified views and a variety of activities suggest the need for a more general classification of nonformal education activities or programmes in order to differentiate them from other forms of education.

In this regard various typologies have been utilized. Criteria used for classification are those related to purpose and content of programmes, approaches to programme and age of clientele. Callaway suggested several possibilities[229] and presented a typology based first on a classification by the age of target group - young people and adults. These two target groups are further sub-classified broadly on the purposes of programme i.e. (i)according to the relationship between learning and work - like pre-job learning, on-the-job learning, and learning not directly related to work, and (ii)according to subjects' previous

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[228] Phillip Coombs: World Educational Crisis. 1968, p.138.

[229] See A.Callaway: "Frontier of Out-of-School Education". in C.S. Brembeck and T.J. Thompson (ed): New Strategies for Educational Development. 1974, pp.19-20.

education i.e. those with formal schooling and those without.

Harbison[230] provides a typology based on the purpose and content of programmes and suggests that nonformal education may be classified under three broad categories:- (1).Activities oriented primarily to the development of skills and knowledge of members of the labour force who are already employed. For example agriculture extension, in-service training etc. (2).Activities designed primarily to prepare persons, mostly youths, for entry into employment. For example youth brigades, village polytechnics etc. which may be an alternative for, or an extension of formal education in primary, secondary or vocational school. (3).Activities designed to develop skills, knowledge and understanding through radio programmes, newspapers, speeches, discussion and day to day activities that transcend the world of work.

Another ICED study of programmes for young people prepared by Coombs and his associates[231] used a similar approach, and their analysis sorts out programmes into four categories according to their principal purpose and subject matter - (1).Agricultural Education: for example youth farmers' clubs, youth settlement schemes, co-operatives, farm learning centres. (2).Artisan and craft, vocational and

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[230] F.H. Harbison: "Human Resources and Nonformal Education". in C.S. Brembeck & T.J. Thompson. op.cit. 1973, p.5.
[231] P.H. Coombs et al.: New Paths to Learning for Rural Children and Youth. 1973, pp.40-41.

pre-vocational preparation: for example rural training centres, apprenticeship schemes, village polytechnics. (3).leadership and civic service: for example national youth services (bridages, corps, pioneers etc.), community development services. (4).General multipurpose and miscellaneous programmes: for example literacy training and school equivalency programmes; youth clubs and centres; sports, recreational and cultural programmes; guidance and constructive activities for delinquents; multipurpose training for women and girls.

Further, Coombs and Ahmed[232] classified the programmes according to four main approaches. These approaches used are: (1).the extension approach, (2).the training approach, (3).the cooperative self-help approach, and (4).the integrated development approach. These approaches indicate the varied range, nonformal education provides. But despite this, the classification mentioned above is not enough for a more precise demarcation between nonformal and other forms of education. A more useful definition is possible if one identifies the defining characteristics of formal education so that a set of characteristics of nonformal education activities can be drawn up.

The concept of education as a lifefong process has been emphasized by the ICED and is equated broadly with learning regardless of where, when or how the learning occurs.

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[232] P.H. Coombs and M. Ahmed: Attacking Rural Poverty: how nonformal education can help. 1974, p.24.

Education, thus defined embraces a variety of skills in a continuing process of learning from the earliest infancy through adulthood and involves a variety of methods and sources of learning. Coombs and Ahmed grouped these learning methods into three categories or learning models: informal, formal and nonformal. These often overlap one another and are usually inter changeable:[233]

1. Informal Education: is a lifelong process whereby every individual imbibes attitudes, develops skills, cultivates values and acquires knowledge from daily experiences and the educative influences and resources in his or her evironment. This would include the deliberate attempt of elders in the family and the community to help young children grow and adapt to the environment. It also includes incidental learning that takes place at work, at play, during travel or through mass media. Informal or incidental learning continues as the child grows up into a young man/women and an adult. This is therefore, a lifelong and universal learning which is as old as humanity itself.

2. Formal Education: has been defined by Phillip Coombs and his associates[234] as the highly institutionalized, chronologically graded and hierarchially structured education system, spanning from primary school through

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[233] P.H. Coombs et al.: op.cit. 1973, pp.10-11.
[234] Ibid. p.11.

university and including, in addition to general academic studies, a variety of specialized programmes and institutions for full-time technical and professional training.

3. Nonformal Education: Coombs and his associates have defined nonformal education in two of their significant publications on this subject.[235] For them nonformal education is as any organized, systematic educational activity carried on outside the framework of the established formal system whether operating separately or as an important feature of some broader activity - that is intended to serve the identifiable learning clienteles and learning objectives.

For a decade now the Michigan State University has been working on the different aspects of nonformal education in developing countries ---- on its concepts, historical perspectives, learning effectiveness, administrative alternatives and on its economics. While emphasizing the difficulties in defining nonformal education, Kleis Russel and Ted Ward[236] suggested that definition will have to vary from situation to situation and they felt that an interim pragmatic definition should have the following four elements:

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[235] Coombs et al. 1973, op.cit. p.11.
Manzoor Ahmed: op.cit.: 1974. p.8.

[236] See Kleis Russel and Ted W. Ward et al.: Nonformal Education: The Definitional Problem. Discussion paper No.2, MSU, 1974.

1. Although they may be linked to formal schools in several ways, such as sponsorship and shared facilities, nonformal education efforts are outside the formalized hierarchical structure of the graded school system.

2. Nonformal education is a deliberately planned educational effort, having identifiable sponsorship, goals and programs. It is not "incidental" or "informal".

3. The "non formality" of an educational effort is taken to reside in its location, sponsorship and administration, but not in either its purpose (general education and specific education), its pedagogical characteristics (highly structured and minimally structured) or its credential status (primary motivation and secondary motivation); and

4. Given these definitional constraints their particular interest lies in a subset of effort that satisfy the above criteria. Those educational efforts that have identifiable developmental purposes related to the contextual setting in which they take place, are defined as the symbol of the concept "nonformal education for development".[237]

Although an attempt has been made to define informal, formal and nonformal education, these categories do not represent rigid models, and educational activities cannot be grouped as one or another discrete entity. One cannot be constrained by Coombs and Ahmed's definitions because each of these educational modes have shades of other modes too.

Formal education ranges from firm rigid formal schools to institutions which have several characterstics of informal and nonformal education. There are institutions to which a child seeks admission in grade I or nursery. Admission to higher grades requires certificate or transcript as a proof to indicate that studies of preceding

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[237] Ibid. pp.45-46.

grades have been satisfactorily completed. The curriculum in such schools is heavy and examination-oriented crushing the spontaniety of learning by the methods of teaching (which are still traditional in the Third World countries).

There are also institutions like nursery, kindergarten or play schools etc. which not only relate their activities to the environment, but emphasize learning rather than teaching, creating circumstances for informal learning. Thus outreaching the rigidities of the system. Yet another type, which forms a part of the formal education system consists of part-time colleges and schools, where the only flexibility is with regard to timing. In other ways they are equally institution-centered and generally follow the same curriculum and examination as full-time college or school, and the length of period required after the first degree of schooling is the same. Within the formal education mode, nonformal implications of formal education might be extra-curricular activities, while informal implications might be peer group processes.

Within the informal education mode too, there can be a wide variety of activities which become formal or nonformal in the specific context of their use. The effortless language acquisition of a child from the environment is informal, but the same language if taught in the school becomes formal. Several educational programmes on T.V., Radio etc. which are usually informal become formal or nonformal depending on how and where they are used.

Similarly, there is a considerable effort in the teaching of work skills to young people by elders. Although it implies an organization associated with deliberate parental instruction in all the activities, yet it could hardly be covered by the definition of nonformal education. However, if these activities are directed towards specific learning objectives and are taught outside the family environment organized by the society, they become nonformal.

Within the nonformal mode, the formal characteristics might lead to the granting of certificates, and informal implication might be the institutional participation. These three categories of educational learning methods therefore, cannot be regarded as discrete entities, but as La Belle[238] asserts, the three educational modes must be viewed as "educational modes of emphasis or predominance" where secondary characteristics of each mode is included in an analysis of one mode. In certain respects both formal and nonformal education are alike, because both have been organized by societies to promote and facilitate certain valued types of informal learning that individuals cannot as readily or as quickly acquire through an exposure to environment.[239] They differ mainly in institutional arrangements and procedures, and to a considerable extent in their subject matter and learning clientele. The

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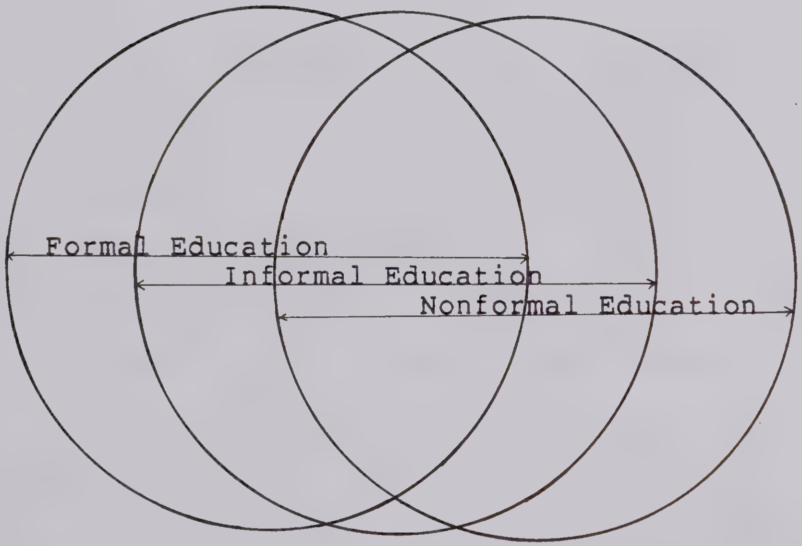
[238] Thomas J. La Belle: "Liberation, Development and Rural Nonformal Education". in Richard O. Neihoff (ed): Nonformal Education and the Rural Poor. 1977, pp.212-213.

[239] P.H. Coombs et al.: op.cit. 1973, p.12.

relationship between formal, informal and nonformal education as three modes of emphasis and both formal and nonformal education promote informal learning processes can be represented diagramatically as given in figure I.

Figure I

Relationship Between Formal, Informal and Nonformal Education



The concept of nonformal education can be understood clearly, if the factors which distinguish it from formal education are delineated in some detail. The variables or salient identifying characteristics of formal and nonformal programmes determine the extent of "nonformality" or

"formality" of a programme. Using Paulston's approach[240] the characteristics of formal and nonformal types of programmes can be specified and explored systematically as to how they differ.

4.3 Modal-defining Characteristics of Formal and Nonformal Educational Programmes

4.3.1 Function

The function of formal education is general all-round development of a person who has entered the system thus providing the basis for an individual's whole future life. With its stress on socialization, enculturation and perpetuation of educational bureaucracies, it helps to legitimize the position of elites, their values and the behaviors. It also constitutes the status selection function since more schooling is an important criterion for elite recruitment. Therefore, acquisition of degrees, diplomas or certificates which equip an individual with opportunities for social and economic improvement, is an end product. Hence rewards tend to be deferred and symbolic.

Nonformal Education on the other hand does not always claim towards contributing to the all-round development of

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[240] Ronald Paulston: "Nonformal Educational Alternatives". in C.S. Brembeck & T.J.Thompson (ed) op.cit. 1973, pp.66-67. See also Anil Bordia: "Nonformal Education: Concepts and Priorities". in Indian Journal of Adult Education, Sept, pp.3-7.

individuals, but rather emphasize resocialization, acculturation and meeting the learning needs of individuals and communities. Emphasis is also on learning of specific knowledge, skills and the development of appropriate attitudes for concrete behavioral changes. In developing countries it is particularly linked with the process of development in an integrated and dynamic manner. Nonformal education of the right kind and at the right place properly tied to complementary efforts can be an important instrument to deal with rural poverty. Rewards in nonformal education are tangible and immediate. They offer short term gains related to work or daily life i.e. to immediate life situation which may improve the material well-being, productivity, self-awareness and/or ability to control environment etc.

4.3.2 Recruitment

Admission into the formal education system is generally between five and seven years of age, and the entrants proceed sequentially up the system. There is little possibility for a person who misses this opportunity to enter the system at a later age. Literacy is an essential component, except at the lowest level, and admission into the higher levels require successful completion of lower level grades.

On the other hand, nonformal education for the purpose of admission, takes into account the competencies of an

individual and attempts to build a learning programme around it. It does not take into account the past schooling, and knowledge of literacy is not (always) essential.

4.3.3 Clientele

Formal education considers all children as its clientele and once they enter the school system, little difference exists between one and another in the organization of teaching or learning. They are defined in terms of their ability to cope with the level of education being offered.

Nonformal education is related to needs and interests of the potential clientele which comprises a homogenous group with more or less of similar learning or educational requirement. There is no age limit, young and old alike are clients. In some societies the ethnic populations, or rural population or population far from cities who may not be serviced by formal education, that is the "educational disaffiliates", are the potential clients of nonformal education programmes.

4.3.4 Content or Curriculum

Curriculum of formal education is generally standardized for large group of clienteles. It is abstract, academic and often ethnocentric, highly verbal and reflect the status quo values of the elites. It is a well defined package of cognitive knowledge with limited emphasis on

practical application. Being academic and theoretical, it is usually isolated from the physical environment and social action.

The content of nonformal education is skill-centered related to the group for which it is meant and designed to produce specific changes in the learners. Units are usually discrete and closely related to the environment and learning needs of the learners.

4.3.5 Locales

Formal education is school-centered and therefore, synonymous with learning in school buildings or campus. The education provided is usually expensive as compared with nonformal education. Learning in formal system is physically isolated from the socio-economic environment and from social action.

Nonformal education takes place in many settings. It may take place in school buildings at free times, but it is often conducted close to where the learners live and work - in fields, factories, offices, co-operatives, associations, wherever development programmes are underway - and it is functionally related to learning. Nonformal education can also take place in church, temple, or mosque involving the priests as teachers. The Khoranic school in Mauritania is an example of avenue for nonformal education.

4.3.6 Time and Duration

The most conspicuous distinction between the formal and nonformal education is with regard to timing. Formal education is almost always, full-time, up to the end of the term and rarely less than an year in length. It usually consists of a lengthy programme expanding for ten years or more. Each level of study is a "stepping stone" to the next level. Thus it is long-cycle and future-time oriented. There is usually a high degree of compulsion regarding school attendance. Especially in the Third World countries, where promotion from one grade to the next is automatic, children's absence from school means loss of an academic year. The long-term cycle of formal education is characterized as incompatible with the world of work.

Nonformal education on the other hand, is not so rigid. Part-time learning programmes of varying nature can be pursued depending on the convenience of learners. The programmes are usually short-term, rarely longer than two years. The duration of programmes depends on the time required to achieve the learning objectives. Because of its high flexibility, it can offer full-time courses, for example: for the teachers during vacation and for farmers in their off season and even correspondence courses for upgrading qualifications and skills for unemployed and employed workers. Its flexibility allows experimentation with new programmes, and most nonformal education programmes are present-time oriented.

4.3.7 Method

In formal education, the method of instruction is class-room or teacher-centered and teaching is done mainly with the help of text books. Knowledge which is standardized is imparted to the pupil by the teacher. Teaching methods are dictated by polices made at the highest level and are relatively inflexible and usually non-innovative. However, the use of mass media is increasing, but very few and only the prestigious schools in the Third World countries are endowed with such facilities. The emphasis is mostly on printed texts.

Methods of nonformal education are relatively flexible, and related to application. The teacher helps the students to interact and master the material to be learned and applied. Therefore, the emphasis is on learning rather than on teaching. Method, media, and material used, are based on the learning requirements of the group as well as its background. It may be class-room instruction, field demonstration, discussion and correspondence study.

4.3.8 Teacher

The significant characteristic of the formal system is a total dependence on teachers, who are formally qualified and certified members of teaching profession with their status correlated with their position in the school hierarchy. The teacher is invested with an authority to determine the content, methods of teaching and evaluation.

The whole process is pedagogical. The usual teacher pupil relationship is that of dominant-subordinate, of giver-receiver and of the active-passive type.

In nonformal education, however, it is not uncommon to find teachers who do not fit the formal model. They are people whose occupations are something other than teaching, who teach intermittently during their pursuit of their occupation or in a 'part-time' capacity outside their on-going job, and are usually engaged in teaching their job skills. They are often para-professionals, or non-professionals, or volunteers in many cases or any one who is prepared to share his knowledge with others who desire. They are not identified as teachers but as supervisors, health workers, extension agents, instructors and so on. They are untrained and therefore can shape their teaching behavior in terms of what they know about what they are doing or teaching. The relationship is on equal term, like a joint enterprise of teachers learning along with students.

4.3.9 Evaluation

Periodic tests succeeded by final examinations are provided in the formal education system in order to assess pupils' grasp of material studied. There is a system of ranking individual learners in comparison with either his/her peers or with agreed upon norms. Nonformal education on the other hand, provides individuals to proceed at their

own pace. This enables the pupils to attend a given course as long as it is possible for them. They can also discontinue it for a specific period of time and then return to the class at the stage they left off. In nonformal education the varying degree of motivation, learning capabilities and the environment from which pupils come are usually taken into account. Since these programmes are sufficiently specific and of short-duration, they allow for fairly precise and frequent evaluations, both in terms of learner performance and programme performance with continuous feed back. It may provide for tests of a level comparable in formal education so that those learners, often with disadvantaged socio-economic background, may have an opportunity to enter/re-enter the formal system and to compete for the socio-economic rewards it it offers.

4.3.10 Control

Formal education is usually an exclusive control of the Minister of Education at the national level or of the Provincial Department at the regional level. The education officers and school masters at the local level form a hierarchy of control connected to the central monopoly over the whole network. Schools are either managed by Government or private agencies which are usually religious bureaucracies. If privately managed, they are often subjected to supervision and guidance by the government functionaries. The whole network is centralized in control

(at national or porvincial level) with decisions usually made at the highest level to be implemented at the lower levels.

Control of nonformal education is unco-ordinated, fragmented and diffused involving a variety of agencies, often private. There may be a considerable autonomy at the programme and local levels with an emphasis on local initiative, self-help and innovation. So decisions could usually be made at the programme implementation level with an involvement of participants. However, considerably greater co-ordination in government activity as well as between the government and voluntary organizations is considered necessary in order to achieve best results.

4.3.11 Cost

Formal education takes place in schools, which are usually expensive to operate. Costs are standardized by level, and increasing at the higher levels of the educational system. Formal education utilizes expensive plant and personnel, involving high opportunity cost of student time and it draws its resources from outside the immediate surrounding community.

In nonformal education there is usually a great variation in costs per programme and per student vis-a-vis costs for comparable education programme in the formal system. By utilizing community facilities and personnel wherever possible and by minimizing the use of specific

facilities, nonformal education reduces the costs.[241]

From the foregoing paragraphs which make reference to the significant characteristics of formal as well as nonformal system of education, it is evident that formal education is usually an expensive affair because of its long-term duration, full-time nature, and takes place in highly expensive institution, drawing its resources from outside the immediate surrounding community. It also tends to be irrelevant to the community as it is isolated from the physical environment and social action. Its inflexibility due to its rigidly structured format and its reliance on the professional staff and external control, makes it incapable of adjusting to the rapidly changing socio-economic and technical conditions. This is what Coombs calls an "inherent innertia" of the educational system.

Nonformal education has an advantage over formal education, because it can overcome some of these drawbacks. It is usually inexpensive, short-duration and relevant to the needs of potential clientele. The nature of flexibility makes it adaptable to local changing needs, and to the convenience of any target group. It can be used for virtually any type of subject matter and learning objectives, and as Coombs suggests, the minimum learning needs beyond those covered by the conventional classroom

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[241] See Manzoor Ahmed: Economics of Nonformal Education: Cost Benefit Analysis. New York: Praeger Publishers, 1975.

instruction can be pursued by nonformal educaton.[242] Lack of central direction and control allows experimentation which enables the sponsors to identify its limitations and either discontinue it because of its ineffectiveness or expand and modify it when the programme is effective. Often being a responsibility of non-governmental and voluntary agencies nonformal education allows an involvement of its clientele in decision-making and can freely accomodate new and unconvetional approaches. This helps in designing programmes to serve all people regardless of their age or educational background.

As nonformal education is usually low cost, short-duration, need-based, aspiration-accomodating, employment-linked, decentralized and highly distributive[243] Grandstaff of the Michigan State University related "the concept of nonformal education to the concept of development" viewing education as a process towards achieving more general social goal rather than an end in itself. More recently, Richard O. Niehoff of the same university at the Nonformal Education Conference in 1976, related nonformal education to the concept of development providing the following working definition:

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[242] See P.H. Coombs: et al. New Paths To Learning For Rural Youth and Children. 1973, pp.13-15. "for minimum learning needs".

[243] M. Grandstaff: Nonformal Education and an Expanded Conception of Development. 1974, p.54.

> Nonformal education is defined for our purpose as the method of assessing the needs and interests of adults and out-of-school youth in developing countries --- of communicating with them, motivating them to participate, helping them to acquire necessary skills, to adopt behavioral patterns and related activities which will increase their productivity and improve their living standards.[244]

This definition identifies nonformal education as a process through which the masses can get involved in decision-making and take an active part to improve their lives. If the masses are involved in their own development then rural development which means rural transformation can be pursued changing not only the methods of production and of economic institutions, but also the social and political infrastructure.

Nonformal education shows high potentiality for producing effective results which may contribute substantially to the patterns of development desired. However, the limits and possibilities of integrating nonformal education into the national strategies of developing societies can be well understood by examining some of the programmes operating in countries of different socio-economic and political conditions. Hence the next chapter examines three case studies of nonformal education programmes in three developing countries with different political structures. From such an analysis it would be possible to see if nonformal education can complement, supplement and provide an alternative to formal education.

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[244] R.O. Niehoff: Nonformal Education and the Rural Poor. 1977, p.8, footnote 1.

5. NONFORMAL EDUCATIONAL PROGRAMMES IN THE THIRD WORLD

5.1 Work and Study Education in The People's Republic of China

5.1.1 Background on China

China is the largest Asian country. In landmass, it is the third largest in the world, with world's largest population of about 964.5 million in 1979, of which 13 percent constitutes urban population.[245] Unlike other Third World countries, China has suceeded in preventing rural urban migration by sending its people to the countryside. This is evident from the reduction in urban population from 24.8 percent in 1975[246] to 13 percent in 1980. Six percent of China's total population constitutes 54 nationalities and the remaining 94 percent of the people belong to a clan, 'the Han people'. While there are significant differences in the Chinese spoken language, all Chinese use same characters for writing[247] therefore, the only one written language 'Mandarin' is used. Alongside changes in the spoken language and the proliferation of dialects in different areas of China, the ideographs of Chinese language are believed to

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[245] World Bank: World Development Report 1981. National and International Adjustment Anex World Development Indicators, Table 1. p.134 and Table 20, p.172.
[246] Akin L. Mabogunje: The Development Process: a spatial perspective. Hutchinson: University Library, 1980, p.170.
[247] J.R. Kidd: "Adult Learning Programs in India and China". Canadian and International Education, Vol.8, No:2, 1979, p.58.

have remained unchanged thus, preserving a cohesive cultural unity.[248]

China's economic structure and national per capita income are similar to other low income countries, but the physical quality of life of majority of Chinese is remarkably better than in most other similar low income countries. The life expectancy at birth increased from 36 years in 1950 to 64 years in 1979.[249] Birth rates in China fell from 34 (in 1960) to 18 (in 1979) per thousand along with decline in death rate from 11 to 6 per thousand during the same period.[250] Chinese success in this area is partly attributed to a concentrated effort in many related and interdependent areas like basic education, health and nutrition and population control. Mother and child care and nutrition programmes which have been made widely available, have reduced infant mortality and birth rate.

Per capita GNP in China has grown at an annual rate of 2.5 to 3 percent during 1957-79 which is significantly above the average - 1.6 percent in 1966 to 79 - for other low income countries.[251] Even though the per capita income in China was $260 by 1979, it is able to feed all its people,

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[248] Ruth Hayhoe: "Written Language Reform and Modernization of Curriculum: A Comparative Study of China, Japan and Turkey". Canadian and International Education, 8:2:1979, p.14.

[249] Starting at about the same level in 1950 the average low income countries improved life expectancy to 51 years by 1979, while the average middle income countries started higher (48 years) but end lower (61 years)

[250] World Bank: op.cit. 1981, Table 18, p.168.

[251] World Bank: op.cit. 1981, p.85.

which means "feeding nearly a quarter of world's population on 7 percent of the globe's cultivated land".[252] Over the last quarter of a century, China has eliminated some of the barriers to development. Inflation is overcome by increasing production and guaranteeing food supply through a combination of state rationing and collective self insurance. Providing basic education for the masses as the primary aim, illiteracy has been reduced from 80 percent to almost nill.[253] Unemployment is virtually eliminated by mobilizing all available human resources into production brigades and work teams.[254] By providing minimum levels of living for all its people, poverty has been wiped out. China's major achievement is in the sphere of income differentiality and general egalitarianism. The disparity between the incomes of rich and poor is one to four.[255] More importantly, it has been able to overcome foreign domination. China has received no external aid since 1966 and in fact, it has developed its own foreign aid programme.

Agriculture is the foundation of its economy which accounts for 31 percent of the Gross Domestic Product (GDP)

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[252] W. Schramm et al.: "China' Experience with Development Communication: How Transferable is it?" in R.O. Niehoff (ed):Nonforma Education and The Rural Poor. 1977, p.195.

[253] R.S. Buttler and P.J. Sheehan: "Changes in China Since the Death of Mao Zedong". Canadian and International Education, 8:2:1979, p.48.

[254] During and since the cultural revolution unemployment was completly eradicated, however, since the death of Mao and the fall of 'Gang of Four' there are reports appearing that unemployment in China is on increase among the secondary school leavers.

[255] D. Chen: "The Economic Development in China". Scientific American, Vol. 243, NO:3, Sept. 1980, p.159.

and over 71 percent of the employment. The share of industry in the GDP is around 47 percent, absorbing 17 percent of the labour force. The share of services is very much smaller i.e. 22 percent which provides employment for 12 percent of labour force. The working age population (15-64 years) is about 64%, and all seem to have employment.[256]

These accomplishments of China are largely attributed to Mao Zedong (Mao Tse Tung), the charismatic leader, who formulated a model of economic development designed to meet China's national needs based on the decentralization of government and economy, the equalization of wealth, the principles of co-operation and sacrifice for the common good and to develop both the urban and rural sectors simultaneously. Mao tried to create a dynamic popular process of social development which "comes from the masses and serves the masses, avoids individualism, over urbanization, consumerism and centralism, and which is free from political or economic elites motivated by personal aspirations".[257] The major changes were accomplished through the 'Communes'.

The Commune in rural China forms an important basic unit of Chinese society, within which industry, agriculture and commerce - exchange of goods and services - constitute their

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[256] World Bank: op.cit. 1981, see Table 19, p.170.
[257] F. Donald Sawyer and Ted Ward: "The Case of the Disappearance Distinction: Formal and Nonformal Education in China". in Ted Ward and W.A. Herzog: Effective Learning in Nonformal Education. 1974, p.333.

material life. The system of communes was adopted by the Communist Party in 1958 by integrating co-operatives into large agricultural units. This was the final stage of land reform in China that abolished individual ownership of land. The Commune at present is a multipurpose political, administrative and organizational unit covering the full range of economic, social and administrative, and educational activities necessary and feasible in rural community.[258] Communes function under the leadership of "commune revolutionary committee".

Production Brigades: Each commune is divided into number of 'production brigades' which are the "basic units of accounting". Production brigades are composed of several units called the 'production teams' or 'work teams' corresponding geographically to a village and each team is composed of 25-30 families. A production team has a management committee of elected members to administer business. Each team is further divided into many 'work groups' each having its own group leader who makes work assignment.[259]

The means of production used for agriculture are owned by production teams, but they are responsible for handing in a proportion of their products to the brigades for

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[258] M. Todaro: Economic Development in the Third World. 1977, p.229.

[259] H.R. Kwang and D.Wo. Thomas: "The Politics of National Development: An Overview of the Post-Revolutionary Politcs in China". Asian Profile, 5:3:1977, p.232.

management cost, welfare, and reserve funds as agricultural tax. They dispose off the remaining major part of their products themselves.[260] In China this agricultural tax is constant and does not increase with the increase in production. While major undertakings are controlled and organized by communes, smaller projects like lower level schools, clinics and simple recreational facilities are set up and run by local units.[261]

Education is now available to almost all children. Primary education is universal. Junior secondary schools are widespread in cities as well as in some of the rural areas. Senior secondary education has become almost universal in big cities. In 1978, school population constituted 140 million elementary students, 60 million middle school students and 600,000 university students. In addition to the primary and secondary educational establishments, new China has opened a number of workers' universities administered by factories, technical colleges and a number of institutions offering courses and training personnel for rural areas. Education is now available almost for all ages begining from the age of 56 days in nurseries to adult education. The success of these achievements in China has often been attributed to the Cultural Revolution headed by Mao that brought about fundamental changes in the structure of

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[260] R.F. Price: Education in Modern China. London: Routledge and Kegan Paul, 1979, p.87.
[261] Ruth Gamberg: Red and Expert: Education in the People's Republic of China. New York: Schocken Books, 1977, p.35.

society. Education played a key role in the cultural revolution.

5.1.2 The Great Proletariat Cultural Revolution

The years between 1949 (when China was proclaimed People's Republic signalling the virtual completion of the 'liberation' phase of the Chinese Revolution) and 1966 (when the Great Proletariat Cultural Revolution 'GPCR' began), the Chinese leadership shifted back and forth between the two different conceptions of what form of education was best suited to China's emerging goals and priorities. Shifts in the educational policy were derived from different ideas of goals and priorities for continuing the Chinese revolution, and reflected larger tensions rooted in political and ideological questions.

The conflict was between the representatives of two 'philosophies' or 'lines' of education - 'Red versus Expert'. Internally the struggle between the two differing lines of thought intensified at all levels of the Party. The 'Red' (Maoist) educational line favoured training students on the basis of their origin and political consciousness generating a balanced development with particular emphasis on educating the children and youth of worker, farmer and soldier origins who formed the bulk of the Chinese population. This was the group that had been denied access to education in the pre-liberation period. They advocated a theory that education was an essential instrument of class

struggle and revolution, and that all should be educated. Education should be a co-operative and collective process where both the teacher and the taught learn from each other. Theoretical work must stem from productive labour and therefore education must be viewed as an integral part of productive labour with all students participating in it. The concept behind this line of thought was to avoid the creation of an intelligentsia. The 'Expert' (bureaucratic) on the other hand, encouraged entrance to schools on a competitive and strictly academic basis developing an elitist education and producing an 'expert' caste apart from and contemptous of the people. Therefore, they opposed manual labour for upper echelon students which the 'reds' insisted upon for all.[262]

The conflict of two lines of thought surfaced from time to time and became to be known as the "struggle between the proletarian and revisionist line in education". The GPCR is rooted in part in the lack of consensus that characterized Chinese Communist educational circles as early as 1949. The conflict between the 'Reds and Experts' that occured from time to time can be represented chronologically as given by Sawyer and Ward:

1949-1955	Soviet Centralism, Kao Kang dominant.
1955-1957	Partial decentralization to the Provincial level. Mao influential but not yet dominant.

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[262] For the two line struggle see Peter J. Seybolt: "Chinese Revolution in Education". Canadian and International Education, 1:1:1972, pp.22-41.

1958-1960	Great leap Forward. Total decentralization with Mao in command.
1961-1965	Re emergence of centralism. Liu Shao-chi in power. Mao ascending towards the end of the period.
1966-1968	Cultural Revolution. Mao became dominant. Destruction of the Central Party Structure. Schools were closed.
1966-1977	Post Cultural Revolution Period.[263]

To this chronology another period can now be added

1976-	Four modernization era.

The Cultural revolution was the culmination of a long lasting struggle between the two lines of development. It was a direct attack to oust the traditional elites from their position of power at the implementation level. Though educational opportunities were more equally distributed than in the pre-liberation period, inequalities still existed upto the mid sixtees and it became evident that little progress was made in the transformation of egalitarian ideals into educational practice

The superstructure of education was still managed by the elite for the elite, while the grass roots sector of population was left at the fringe of education and development.[264] Mao came to a conclusion that after 17 years (1949-66) of communist rule, the educational system was not

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[263] F.D. Sawyer & Ted Ward: "The Case of the Disappearing Distinction: Formal and Nonformal Education in China". in Ted Ward and W.A. Herzog: Effective Learning in Nonformal Education. 1974, p.334.

[264] Shiu L. Kong: "Education in Asia: Introduction". Canadian and International Education, Vol.8, No:2, 1979, p.9.

only failing to produce dedicated successors to carry out the proletarian revolution, but was actually nurturing bourgeois-oriented individuals whose view points were opposed to that cause. Therefore, in 1966 the struggle between Mao with his supporters and Liu Shao-chi with his supporters began initially as a debate on the ideological front attacking Liu's policies. These debates gradually spread to the educational system dealing initially with the fundamental question about its structure. The struggle then became intense with criticisms, self-criticisms, conflicts and later on physical violence which led to the closure of schools.

The GPCR attempted to reform not only the education system, but also the individuals who identified with it. The repudiation of educators was only one theme in a much broader conflict, namely the revolutionizing of old teaching guidelines and methods that had been in existence prior to 1966. The revolution in education was held to be of tremendous significance in the broader social and ideological content and in main, the aim of the cultural revolution was clearly the creation of a new personality, the 'New Socialist Man'. Though Mao has not written specifically on the qualities of 'The New Man', it is possible from an examination of his work to identify at least some of the desirable qualities he had in mind. Qualities of "The New Man" that are identified are:

1. Selflessness, a rejection of personal ambition;
2. Loyalty to the people, the revolution, and the Party;
3. Class consciousness, expressed in a readiness to continue to engage in class struggle;
4. An industrious and scientific attitude.[265]

With such qualities in man, Mao aimed at establishing a 'Socialist New China'. When schools were closed, students from middle school, college and university as 'Red Guards' went out in streets to demolish the old customs, ideology, culture and habits - called 'Four Olds' and to create and cultivate among the masses an entirly new proletarian ideology, culture, customs and habits,[266] that are in consonance with a classless and equitable society.

So the goal of Cultural Revolution was the reconstruction of a 'Socialist New China', which Mao believed could be established through education. Mao never isolated education from revolution. He believed that education is the political power which promotes changes in society and in the world, and changes in action and thinking of men. He held a broad view of education, emphasizing that all activities of life and work are forms of education.[267] So all revolutionary movements - political, economic or military - were considered by Mao as educational, because they had impact upon the minds and behavior of people. He developed a reformed school system to carry on the proletarian revolution and create a classless society.

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[265] W.F. Connell et al.: China at School. 1973, p.29.

[266] Cultural Revolution Document 2 Vol:5, 1966 June 6. p.23 quoted in R.F. Price: Education in Modern China. 1979, p.2.

[267] Don chen Chu: Chairman Mao: Education of the Proletariat. New York: Philosophical Library, 1980, p.406.

Several significant pronouncements on education question were published during the period of cultural revolution. One of the documents which probably influenced the development of educational strategy more than others, was the Chinese Communist Party Central Committee Decision on the GPCR. It was known as the 'Sixteen Points'[268] which was adopted on 8th August 1966 giving encouragement to the struggle and guidance as to how it should be waged. Point 10 of the guideline that outlines some of the basic tenets of the new educational programme that Mao hoped to institute, reads:

> In the Great Proletariat Cultural Revolution a most important task is to transform the old educational system and the old principle and methods of teaching.
>
> In the great cultural revolution, the phenomenon of our schools being dominated by bourgeoisis intellectuals must be completely changed.
>
> In every kind of school we must apply thoroughly the policy advanced by Comrade Mao Zedong of education serving proletarian politics and education being combined with productive labour, so as to enable those receiving an education to develop morally, intellectually and physically and to become workers with both socialist consciousness and culture.
>
> The period of schooling should be shortened. Courses should be fewer and better. The teaching material should be thoroughly transformed, in some cases begining with simplifying complicated material. While their main task is to study, students should also learn other things. This is to say, in addition to their studies they should also learn industrial work, farming and military affairs, and take part in the struggle of cultural revolution to criticize the bourgeoisie as these struggles occur.

Such radical reforms introduced during the revolution, were

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[268] For 16-Point decision see Appendix Group B, pp.234-273 in The Maoist Educational Revolution. by Theodore Hsi-en-Chen, 1974.

however not new, because they had been tried earlier on a smaller scale. The only difference was that these reforms gained impetus during and after the revolution because, the masses had attained a greater degree of political consciousness and stood up against the traditional elites. They gained control of schools through the system of 'three-in-one' - the participation of teachers, students and workers in administration of educational system. The success of the cultural revolution enabled implementation of reforms in the interest of proleteriat. The focus in educational reform was the integration of productive labour and education, thus deformalizing the educational system.

5.1.3 Education and Productive Labour in China: Work and Study Programmes

5.1.3.1 The Begining of Work-Study Education

The policy of combining education with productive labour evolved in the 1930s and 1940s when the communists were fighting the Japanese from their Yenan base area in Northern-Central China.[269] During that period work-study education was the only possible educational pattern in Yenan because it was impossible for Chinese in this liberated and backward area to send children (even one child) to school and forego income from their labour. Moreover productive

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[269] See P.J. Seybolt: "The Yenan Revolution in Mass Education". The China Quarterly, No:48, 1971, pp.641-669. for a description of communist policies in Yenan.

labour was essential for survival of Yenan and Communist movement. It was necessary to educate all people for struggle of independence so the whole liberated area was like a big school, where all young and old were involved in teaching and learning. From primary through university, education was integrated with work, where students and teachers working side by side making their own school material from available resources and working in factory and farms, supported their school.

After China was liberated, this work-study education was however abandoned in favour of the Soviet model. Disenchanted with the Soviet approach, Mao, during the Great Leap Forward (in 1958), formally introduced the policy of integrating education with work in the school curriculum in terms of "schools running farms and factories, and factories and farms running schools"[270] which was to have moral-political, intellectual and economic benefit. These experiments were carried on for a brief period from 1958-60, but from 1960-66 though not universally implemented, most schools incorporated labour activities, especially in rural areas. In urban areas too, schools continued this system supporting themselves.

This system ran as a dual structure in order to expand educational opportunities for all and relate education to local needs. This dualism in education was mainly due to the

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[270] R.F. Price: "Towards Educating Workers with Socialist Consciousness and Culture: The case of the People's Republic of China". Asian Profile, 5:6:1977, p.527.

lack of financial support from the government which could not afford to build and staff enough schools to universalize primary education and expand secondary education. It was only after 1968 that the policy of integrating work and study was implemented in regular schools throughout China. This new system of education, highly decentralized and diversified emerged in which the principle of combining education with productive labour was applied to all levels of schooling from kindergarten to the university. The policy of integrating work with education is still followed in the education system, though the degree of implementation has decreased since Mao's death. The following discussion is based on the reformed system that was implemented during Mao's period, when nonformal education was merged with formal education deformalizing schooling. However, the reader is cautioned that the nature of Chinese culture is impenetrable to western observers and the information presented here is based on the experience of their very short visits to China and the translations of the Chinese publications. It is difficult to separate propoganda and gullibility from facts and also extremely difficult to assess for sure what in fact was happening in China during Mao's period.

5.1.3.2 Concepts of Work-Study Education

The phrase 'combining education with productive labour' which appears in point 10 of the 'Sixteen Points' was the

keystone to Maoist approach to education. Productive labour was seen as a fundamental activity of the educational process, because it was regarded as an indispensable means of producing persons with a well balanced development, and a proletarian outlook - that is morally, intellectually and physically fit persons capable of understanding successfully the three main tasks of Chinese society - class struggle, struggle for production and struggle in scientific experimentation.

Productive labour in school was not aimed primarily at giving young people technical training, but was an important social reform, a step towards narrowing the gap between town and country; between worker and peasant; and between mental and manual labour - an important principle of socialism.[271] Such an education was to prepare China's younger generation to become worthy successors to the revolution started by older generation and inculcate respect for work, especially manual labour and an appreciation of the importance of working class.

Chinese schools were aimed to bring up students who would serve the people whole heartedly and possess the knowledge and skills to work for the common goal. It was perceived that only by direct participation in productive labour, students could develop a feeling of comradeship with the workers, peasants and soldiers and with Chinese society

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[271] Yang Tchen: "Education and Productive Work in China". Prospects, Vol:7 No:3, 1977, p.414.

in general, making their thinking more proletarian.[272] The Chinese expected that by participating in productive labour throughout their earlier period of life, young people would understand the realities of work as the basis of social life and wealth, and at the same time acquire the spirit of working people. Getting accustomed to the real work situation, Chinese youth would begin to accept it as a normal part of life and not learn to expect an easier, privileged future. Thus productive labour was conceived as a means of curing the 'elitist ailment' and fostering the ideal of 'serving the people'.[273] This policy of combining education with work, as Price maintains, was central to the long term communist aim of reducing the "three great differences" - between industry and agriculture, town and country, and mental and manual labour.[274]

Education in China was therefore no longer confined to the classroom, mere memorization of facts or passive learning. In urban and rural areas alike, primary and secondary schools established links with factories, people's communes and army units in the neghbourhood along with workshops and farm plots managed by them. In places under favourable conditions schools are believed to have even set up their own factories and farms. Students at all levels, worked in workshops and farm plots managed by them and also

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[272] R.N. Montaperto et al: China's Schools in Flux. 1979, p.88.
[273] Rudkger Machetzki: "China's Education Since the Cultural Revolution". The Political Quarterly, 45:1, 1974, p.66.
[274] R.F. Price: op.cit. 1977, p.528.

left school to work in factory or farming communes. The amount of time spent in productive labour and the type of labour varied from one level to the other.

5.1.3.3 Productive Work and Education in Kindergarten

Kindergartens and nurseries were available to the majority of children in towns and cities and increasingly for children on the rural people's communes. There were nurseries for infants and children from the age of 56 days to generally around two and a half years. Many were attached to work places, thus allowing mothers to bring babies to work with them and leave them with the trained personnel to take care of, for the day.[275] From the age of 2 or 3 to 7, children attended kindergartens most often set up by the neighbourhood associations in cities, and production teams or brigades in the countryside, and therefore they were within the vicinity of their homes.[276] There were also boarding facilities for children whose parents worked either odd shifts or were too far from home to return each day.

Kindergarten education was specifically designed to encourage devotion to the people. Physical education was composed of exercises and playing free or organized games designed for physical development and co-operation rather than individual competitiveness. The cultural aspect which included songs, dance, playlets etc. provided themes that

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[275] Ruth Gamberg: Red and Expert Education in the People's Republic of China. New York: Schocken Books, 1977, p.48.
[276] Ibid.

were concerned with the lives of workers, peasants and soldiers, and solidarity with the liberation movements. Songs were composed to give every young child an awareness of desirability of serving people and the nation. They aimed at building an awareness of the importance of agriculture and industry to China's development, but more importantly they sought to make students aware of the fact that people like themselves were the ones who produced vital goods by hard labour.[277] Physical development was linked closely with intellectual and moral training related to productive labour in which all children were engaged and which introduced them to agriculture and industrial work.

Visitors to China on educational tours witnessed children engaged in productive labour as a corallary to education. Sylvia Mauger noted that at a kindergarten in Canton, children not only helped to produce some of the vegetables for their own meal on the school's small farming plot, but also spent 20 minutes each week in 'industrial labour'. They worked bending little boxes into shape, opening small plastic bags, or trimming (with very blunt scissors) plastic tooth caps. They worked meticulously and with pride knowing that their goods were utilized in local factory.[278]

In No:2 Peking kindergarten, Frazer and Rites observed children engaged in weaving strips of brightly coloured

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[277] R.N. Montaperto et al.: op.cit. 1979, p.109.

[278] Peter Mauger et al.: Education in Modern China. 1974, p.38.

paper into attractive belt-like streamers for decorative purpose,[279] while in Tienstsin, at Ho Ping District No:1 kindergarten children made paper bags for wrapping shoes and thread flex into the plastic knobs of light cords.[280] Another example of productive labour in agriculture was noted by Ruth Gamberg who visited the 'East Is Red kindergarten' and saw children helping to cultivate a sizable garden. She maintained that much of the work was done by teachers, but children assisted at each step - planting seeds, watering, weeding and helping with the harvest. Since children worked in the garden, they were able to identify the crops they grew and knew medicinal value too. Gamberg also noted in a kindergarten workshop, children working in different groups on different tasks, like putting strings on tags that were later to be attached to sewing machines, opening small plastic bags for placing pieces of electronic equipments, closing one end of small cardboard boxes for packing locks, separating paper from the cords of used badminton shuttlecocks. She also observed students carefully placing the left over materials for recycling.[281] Such activities instilled in children not only manual skills and dignity of labour, but also the value of thrift, which indicate an application of Mao's thought that "education must spread the ideas of building our country through

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[279] R.N. Montaperto et al.: op.cit. p.110.

[280] W.F. Connell et al.: China at School. Ian Novak, 1973, p.81.

[281] Ruth Gamberg: op.cit. pp.99-100.

industriousness and thrift."

Thus, activities which involved work and study in the kindergarten not only developed useful manipulative skills, built personality traits and habits that prepared students for a life of productive labour, but also promoted a love of labour and a realization of the importance of production in overcoming China's economic backwardness. Productive labour, self-reliance and devotion to the people had all been brought into sharp focus by the cultural revolution.

A certain amount of kindergarten time table was devoted to formal teaching. By the time children reached primary school, they were expected to master 50 Chinese characters, be able to write a little and do simple addition up to 10 and be able to draw and colour simple objects accurately.[282]

5.1.3.4 Work and Study in Primary Schools

Since the cultural revolution, primary education became widely available to children, and it's cycle was reduced to five years. In rural areas primary schools were run by rural production brigades, while neighbourhood associations and small factories established schools in cities. Curriculum at the primary level consisted of five courses: (1)politics and language, (2)arithmetic, (3)revolutionary literature and art, (4)military training and physical culture and (5)productive labour.[283] Primary schools had their own

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[282] Peter Mauger et al.: op.cit. 1974, p.39.

[283] Ibid. see Appendix: Draft Programme for Primary and Middle Schools in Chinese Countryside. p.80.

workshop to apply the theoretical knowledge learnt in classroom into practical work. Time spent by students in productive labour varied according to age and grade. All students in lower grades spent an hour or two a week in workshop or garden plots maintained by the school. The labour time was gradually increased to about three to four hours a week for the fifth graders. This labour usually occured in factories or farms that were associated with and were close to school or in places that needed additional labour input.[284] In general neither students nor schools received remuneration for factory or farm work.

Several examples of productive labour activities in the Chinese primary schools can be cited which reveal the integration of productive work as nonformal activities complementing formal education in schooling. For example at Chen Hsien Chia school, workshops produced parts to be used in the Wanking Lorry Repair and Maintenance Plant and during each term, children in turn spent a whole week working on a nearby commune or in the school workshops. Another week was spent on school vegetable garden. In fact, the children spent a whole week on whatever task was alloted to them. William Edmond, who visited China noted that some of the jobs in workshops were skilled and sophisticated, like constructing air filters, electro-plating oil filters using acid baths, and stop-thread for busses were filed into

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[284] G.R. Arnig: "Curriculum" in R.N. Montaperto et al.: op.cit. p.87.

shape.[285]

Frazier and Rites observed the first graders in Peking No:1 Experimental Primary School, and students from other grades, who spent several hours each week folding and gluing small cardboard boxes which was to contain the voice mechanism for talking dolls produced by a neighbourhood local factory.[286] These activities, which formed a part of education in most cases related to the theoretical knowledge learnt in school, also provided physical benefit to students; developing their manual dexterity, cultivating qualities of concentration, self-discipline and giving importance to the quality of finished products. Participation in such activities enabled students to identify in contrete ways with the proletariat who performed such labour on full-time and regular basis. In this way the Chinese believed that students began to develop an appreciation for the reality of daily lives of workers and were thereby rendered less suceptible to becoming divorced from labour and from the masses.[287]

While labour participation at the primary level was educational rather than economic, it received equal seriousness and attention paid to other subjects. The main purpose of primary school was to expose students to atleast a portion of the environment of worker by turning them into

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[285] Peter Mauger et al.: op.cit. p.42.
[286] C.M. Frazier and W. Rites: "Work and Study". in R.N. Montaperto et al.: op.cit. 1979, p.100.
[287] Ibid. pp.111-112.

workers for a while, so that students by acting as workers, come to think as workers and carry that thought pattern throughout their life no matter whether they ended up working in a factory, farm or research institute. So, by combining theory with practice, children learnt to cherish physical labour and appreciate the normal working conditions and not mind getting their hands muddy or oily which often students in other countries do avoid. In China's educational efforts, labour formed a dynamic component of educational participation by children in concrete productive activity.

5.1.3.5 Work and Study in Middle / Secondary Schools

In 1976 about 60 million students were reported to be in middle or secondary school and estimated percentage of students from rural areas who went to middle schools generally ranged from 60 to 70 percent, and in cities from 80 to 90 percent or more (100 percent in Naiking and some other cities) with the percentage always increasing. Middle schools in the countryside were directly under the supervision of people's communes usually of the production brigades. Peasants served on the school's revolutionary committee and whenever necessary, as part-time teachers they conducted classes on rural history and the foundation of agriculture which included geology, biology and chemistry through such practical matters as seed selection, soil chemistry, fertilizer production, soil erosion and water control. They also supervised physical labour on the

communes in which all middle school children participated.[288] Services of workers, peasants and soldiers were used in addition to a staff of full-time professional teachers at all levels.

According to Article 24 in the famous Kirin program set out by the Revolutionary Committee of Lishu County in Kirin province and published in the People's Daily on May 12th 1969, five courses were taught in middle school: (1)education in Mao Tse Tung thought (including modern Chinese history, contemporary Chinese history and the history of struggle between the two lines within the Party); (2)basic knowledge for agriculture (including mathematics, physics, chemistry and economic geography); (3)revolutionary literature and art (including language); (4)military training and physical culture (including the study of Chairman Mao's concepts on people's war strengthening the idea of preparedness against war, and activities in military training and physical culture); and (5)productive labour.[289] William Edmond noted that middle school year was roughly divided into 70 percent for study and 30 percent for physical labour: for learning from peasants and workers.[290] The relationship between work and study was similar to that found in primary schools, but there were differences in the

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[288] Ronald Berger: "Middle Schools". in P. Mauger et al.: op.cit. 1974, p.46.

[289] See Appendix: Draft Programme for Primary and Middle Schools in the Chinese Countryside in Mauger et al.: op.cit. p.80.

[290] P. Mauger et al.: 1974, op.cit. p.48.

quality of experience and in its intensity. The goals of programme in middle schools were more sophisticated. Each school had its own workshop or small factory whose production was normally used for the local factory.

As per Mao's instructions, middle school students were to engage in an equivalent of one or two full days work each week at school run factories or farms, and in addition, were required to spend two months each year working at an agricultural commune and industrial plant.[291] All students spent several hours a week in school operated factory producing items. The items produced in school workshops depended to a large extent on the requirements of local factories. Edmond pointed out that the items produced, ranged from electric motors, diodes, batteries, switch boards, transformors, meters, radio parts, cabling for trucks, printing circuits, tractor parts to medicines from herbs and haversacks. The raw material was provided by the state or factory and after deducting the cost of material, the schools were paid for the items they produced.[292] Even though students didn't receive remuneration for their work, schools received payment for their output which was used for purchasing sports equipment and other materials to enrich the school. Thus productive labour in middle schools had an economic value to them.

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[291] R.D. Berendsen: The Educational Revolution in China. Washington: US. Govt. Printing Press. 1975. p.33.
[292] P. Mauger et al.: op.cit. p.49.

Most middle schools set up their own factories on the school grounds or they were associated with neighbourhood factories or communes in suburbs. School assignment to the factory was usually correlated with the courses in which students were enrolled. Those enrolled in courses like physics, chemistry and mathematics, worked in factories. While those who had not reached this point yet in the course rotation or those specializing in agriculture, spent their labour in commune's fields. All students were expected to spend equal time in factory and farm in rotation each year. Ruth Gamberg visited senior middle school on Da Li People's Commune which operated two factories. At one, radios were made and at the other, alcohol was produced from the liquid waste of a nearby chemical plant. She made an observation that students there, manufactured a daily output of two and a half gallons of alcohol for their own use and for a neighbouring school to conduct laboratory experiments. They also operated a small experimental farm of one and a half acres cultivating improved strain of rice, wheat and rape seed.[293] Middle schools in rural areas had their own agricultural projects and students were also assigned to other agricultural activities in communes.

Nankai Middle School, Tienstsin was indicated to have had an advanced industrial work where students constructed transistor tubes. In a series of small laboratories,

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[293] Ruth Gamberg: Red and Expert: Education in the People's Republic of China. 1977, p.100.

students purified water, washed, cleaned and sliced silicon plate and then oxidized it in a 1200 degree centigrade furnace.[294] Besides working in workshops, students spent one or two months in a factory working for uninterrupted six hours a day engaged in the detailed work. In the factory they performed productive work such as maintaining and repairing machinery and equipment as a regular worker. This was a sort of intership program for students before graduation. It enabled them to work independently, to learn to solve problems, to apply and test theoretical knowledge, and to enjoy close interaction with an environment that was similar to that which he or she would eventually enter as a contributing member of the Chinese society.[295]

Fang Hsueh described the working of a school-run factory in Peking. The factory run by the No:31 middle school included an automobile elecric-circuit system shop, a machining shop and a magnetic amplifier assembling shop. This factory made electric-circuit systems for more than four thousand trucks each year built by the Peking Motor Vehical Plant, and the cable couplings used by the Peking Power Supply Bureau.[296] The main purpose of this middle school was to bring up students as workers with both socialist consciousness and culture, combining education with productive labour and integrating theory with practice

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[294] W.F. Connell et al.: China at School. 1973, p.84.
[295] R.N. Montaperto et al.: op.cit. p.117.
[296] Fang Hsueh: "A School run Factory in Peking". Prospects, Vol.5, No.4, 1975, p.497.

and at the same time enabling students to create wealth for the state. Due to this experience of work in factory while studying, Hsueh noted that middle school students were generally capable of operating lathe, punching and milling machines and electric motors.[297] Hsueh further maintained that by participating in industrial work students were in a position of enhancing collectivism: taking the interests of whole into account and working in unity, acquiring self-discipline, and cultivating the qualities of diligence, frugality and caring for public property. Since the goods manufactured by students in school-run factories were utilized for real use in socialist construction, the students also developed a sense of responsibilty and seriousness in revolutionary work.[298] School run factories in China followed the principle of self-reliance and made use of available resources expending little money by using out-of-date discarded machine tools from big plants, repairing the damages and operating them. In many instances, factory premises were built by students and teachers themselves using available resources, and in the case of financial difficulties, they received subsidies from State.

Yuehkochuang is a village in Lukouchio Commune in Peking. The Yuehkoch village middle school teachers and students invented an 'insect lamp' which destroys about five kilograms of insects per night. This invention is believed

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[297] Ibid. p.498.

[298] Ibid. p.499.

to be a boon to farming, because it destroys dozens of insects which are a serious pests in the growing season. Fang Hsueh noted that when students found that the electrified wire screen of the lamp was a hazard, they further modified it introducing an automatic device to cut off the current at the approach of people and animals. Another automatic device was developed as an advanced modification to turn off the lamp at dawn, when it rains or when it is windy. It seemed that the teachers and students had also made a transistorized insect exterminator for use in mountanious districts which did not have electric power. The insect lamp is now produced in large numbers in a factory run by the school which is located in a vegetable farming community.[299] This simple invention which was an outcome of relating theory with practice, proved a service to farming community and was also an evidence of industrious and scientific attitude or struggle in scientific experimentation by youth which Mao hoped to cultivate in 'The New Man' as a quality for developing a 'Socialist New China'.

The curriculum of school in China is related to local needs. Decentralization of control enabled schools to work out programmes that were of immediate relevance to local conditions. For example, Luhkouchiao Commune worked out a ten-year programme which required replanning the layout of

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[299] Fang Hsueh: "A Visit to a Village Middle School on Peking Outskirts". Prospects, Vol.5, No:4, 1975, p.503.

land and construction of roads and new villages. Since then, the Yuehkochuong village middle school linked its teaching with this plan. The students helped the production teams survey the land gradients, worked out the amount of land to be excavated and manpower required for doing it. To help the production teams with construction, they even mapped the surveyed area and handed down the drawings.[300] Applying the theoretical knowledge of mathematics, physics and geometry, the students of this school were believed to have prepared a plan of irrigation system for the commune's ten year programme.[301] Hsueh also observed that students learnt accounting by participating in account-clearing in the commune production team. In 1974 they were divided into groups and sent to 34 production teams where they tested the soil for acid, alkaline, moisture and other contents. The findings they filed, proved useful to the production teams in improving the soil and applying water and fertilizers rationally. This school is believed to have trained about 60 soil analysts for the production teams.[302] Teaching curriculum relevant to the immediate needs and integrating theory with practice helped to train personnel for the needs of rural districts in Luhkouchiao commune. Thus, students not only had education, but through their education they contributed to the social and economic development of rural areas.

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[300] Ibid.
[301] Ibid. p.504.
[302] Ibid.

Not only did students worked in workshops and factories or carry out small projects, but during the busy season, students and teachers formed groups and each group linked with the production teams, helped the peasants with sowing and harvesting. Though production in schools provided a general rather than a specialized vocational education, the work experience on the one hand helped students to acquire skills, knowledge and attitudes designed to open up career opportunities and to enlighten their choice of careers. On the other hand, it helped to test the classroom knowledge in the real life context and at the same time to come into intimate contact with the less educated members of society and acquire a proletarian attitude and a general understanding of the production process. By participating directly in the production work, students developed a feeling of comradeship with the workers and peasants of Chinese society. These work experiences in China always had a group and political goal, rather than a goal of individual advancement.

While students in the countryside generally improved their industrial skills working in the workshops set up by schools, rather than attending exclusively to agricultural pursuits, urban youths similarly expanded their knowledge of both agriculture and industry. They worked in school workshops and factories in cities and also in communes where they spent their time working closely with the peasants for several weeks without any interruption. However, after their

middle school graduation, the urban youths were sent down to the countryside. This movement of youth to the countryside was (and is) a regular phenomenon to enable urban youths to acquire proletarian attitudes from peasants in the countryside.

5.1.3.6 Transfer of Urban Youth Down to the Countryside

To instill proletarian ideals, Mao had introduced the "hsia-fan" movement (farmward movement). Under his great call "educated must go to the village to receive a re-education from the poor and lower-middle peasants", several million young students went down to the rural areas. They moved into villages, border areas, to the people's communes, production and construction brigades and to state operated farms to unite with the workers and peasants[303] and to learn class consciousness and humility from the peasantry. At the end of the cultural revolution, this movement gained impetus and a programme was begun to resettle urban junior or senior middle school graduates in the country's rural or sub-urban communes.[304] The aim of this programme was to enable urban youths receive work experience on the farm, help the production and gain a better understanding of the needs of rural China.

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[303] People's Daily Editorial 1973, "Made Progress In Doing A Good Job With Educated Youth Who Go Up To The Mountain And Down To The Countryside". in Chinese Education, Vol.8, No.2, 1975, p.6.
[304] R.N. Montaperto et al.: China's Education in Flux. 1979, p.118.

Ronald Berger describes the arrangement of sending the urban middle school students to the countryside, where physical labour centres on the 'branch school'. It is like a school in the countryside for urban youths. This is generally an area of waste land that may vary from 25 to 50 acres on which students and teachers construct their own living accomodation and classroom. Berger cited an example of Kwangchow branch school which had a twenty six acres of land on which was produced rice, sugarcane, some vegetables and fruits, and poultry. In addition, it ran a small weather forecasting unit and a small hydro-electric station. The students spent three days studying and three days working, while some sessions combined both. In the evening students gathered together with the peasants to exchange experiences. Their lessons included writing about the village history and biographies of peasants. In the busy seasons, they worked with peasants in the fields. Their mathematics lessons included exploring the system of tax, rent and interest that were practised by landlords and money lenders in the past and also the then existing system of accounting and book keeping used by production brigades and team.[305]

Thus, living in the counryside and working with the peasants, students learnt about the real life experiences of rural people. On the other hand, rural population seemed to have benefitted from the relatively sophisticated group of new residents which in effect, narrowed the cultural gap

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[305] P. Mauger et al.: Education in China. 1974, p.49.

between the urban and rural sectors. Peasants themselves got involved in education imparting political education to students and in turn learning from them. Sometimes there were reports of discontent among the urban students and villagers themselves, nevertheless, the system of criticism, self criticism and the political education is believed to have enabled them to overcome the rift, and the mutual understanding between them brought them together to work for the common good.

Since the cultural revolution, about eight million educated youths, most of them from middle school, have been estimated to have moved out to settle in the countryside between 1968 and 1973 in response to Mao's great call that young people with education should go to the countryside.[306] Peter J. Seybolt in his editorial to the journal "Chinese Education" (8:2:1975) noted that about two million (25%) of the educated youth who went to the countryside, had returned to cities and towns for further schooling or to work in factories, but the rest were believed to have settled permanently in agricultural communes or state farms or in forest areas and in relatively underdeveloped border areas. A further estimation from the Chinese Press indicated that about two million educated youths move each year to rural areas. This campaign in seven years (1968-1975) had relocated probably 12 million people and there appears to be

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[306] Hsin Wen: "Primary and Secondary Education". Prospects, 5:6: 1975, p.486.

no indication that it is slackening.[307] Many of these youths who were desirous of becoming technicians, machine operators, accountants, veterinarians, barefoot doctors, teachers and cadres (political representatives) were said to have acquired attitudes of hard work, frugality and humility from peasants. Thus becoming worthy "successors to the proletarian revolutionary cause".[308] Led by the Communist Party and guided by the peasants, young people seemed to have become new-style peasants with education and social consciousness making an important contribution to the building of a new socialist countryside. The programme of students' resettlement in the countryside, helped to reduce rural urban migration and unemployment.

Most youths settled down in the countryside. Some of those who returned, worked in the factories in cities. Before proceeding to the university education, students were required to have work experience of two years (this system has changed since Mao's death and the changes will be discussed in "post script"). No crediantials, entrance examinations or marks were required for admission. Students were required to be politically sound in their views and physically fit. In many cases if a person's political credentials were impressive enough, it was not even necessary for him to have completed middle school in order

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[307] P.J. Seybolt: Chinese Education, Vol.8, No:2, 1975, p.3.
[308] Ibid. p.4.

to gain a university admission.[309] This was mostly applied to the workers and peasants with 10-12 years of work experience.

Thus, by introducing productive labour and laying emphasis on it, Chinese schools not only instilled knowledge and skills of vocational relevance, and a feeling of participation in the development process, but also helped to deemphasize the value of traditional schooling where only academic achievement was best rewarded. It also instilled a collective consciousness and developed freedom, destroying the authoritarian relations of classroom as both teachers and students worked together towards a common goal. Greater flexibility in implementing curriculum and programmes related to local needs was possible mainly due to the decentralized educational control. After Mao's death, the administrative structure at the local level has remained unchanged, except for the central co-ordination.

5.1.4 Decentralization and Centralization of Decision-Making

The slogan "from the masses to the masses" has been Mao's policy of 'mass line' which allows extensive decentralization of control and policy implementation ensuring that schools would better serve the local needs. Decentralization of decision making and the policy implementation does not mean that there is a lack of central

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[309] Ted Ward and W.A. Herzog: Effective Learning in Nonformal Education. 1974, p.340.

control. It involves a two way interaction between leaders and masses. Through the system of 'mass line', needs and opinions of the masses are worked and reworked into policies in a process that leads to both mass understanding and active support. The 'mass line' is an important link not only between the Party and the masses, but also between the higher levels of the Party and cadres at the basic levels.

The Chinese cadre system appears to be a highly efficient network of political representatives that penetrates down to the individual peasant. Since the masses in China form the foundation of Chinese Communist regime, they are held together by the efforts of the cadres, whose role is very crucial in maintaining harmony within the country. Cadres (working party members) are persons holding important positions in the Party, working in State institutions or department of production. They have been recruited from the Peoples' Liberation Army, men with record of struggle in the Anti-Japanese and Civil War (in pre-liberation period), from the 'activists' among the working class, from among students and graduates of university.[310] The cadres are closely involved with the masses working in all areas of endeavour. Gourlay presents cadres as members capable of unifying and leading the masses to implement the Party and the Government policies and direction. Besides disseminating and extending Party objectives, cadres, particularly the peasant cadres serve as

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[310] R.F. Price: Education in Modern China. 1979, p.79.

a source feed back and criticism as well. They are integral factors of the Chinese society in implementing Mao's mass line policies, monitoring through small group interaction the attitudes, grievences, and comments of masses and conveying them to the higher level cadres whenever necessary for policy consideration.[311] In this way individual party members are able to discover and understand the views that are held most important in the society by different segments of population.

Ideas and opinions at the grass root level offer a source of open discussion with the masses. The discussed ideas and opinions are then collected by peasant cadres and passed on to the higher levels of Party organization in the course of Party meetings which are held in work environment. Thus the most senior members of the Party are kept informed about what the masses and administrators at the lower level think and feel about important matters. The basic level Party members exert influence and control over the higher levels and have inputs into the policy formulation.[312] Once the summed up views and opinions are received at the higher levels, they are assessed and analyzed in relation to the preferences of the Party ideology. The resulting decisions are sent back to the level of implementation through the same party apparatus. Any policies or plans formulated at

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[311] Walter Gourlay: "The Chinese Communist Cadre, Key to Political Control". quoted in Ted Ward & W.A. Herzog: Effective Learning in Nonformal Education. 1974, p.348.
[312] R.N. Montaperto: op.cit. 1979, p.65.

the highest level of the Party are also subjected to open discussion at all levels. Thus, cadres represent the government to the masses, and masses to the government.

The educational system and its organization that emerged after the cultural revolution existed to serve the people, and it is the Party that defines the interests of people in terms of building socialism. It formulates basic principles that determine the general interest and direction. Education is largely decentralized to a level that the main emphasis is placed on grass roots control encouraging the localities to use their asset to support activities they desire. However, there is a central co-ordination which emerged after Mao's death. The administrative structure co-ordinates one level of government with the next. This co-ordination is made possible through a National Ministry of Education which maintains departments at lower levels of government and takes an over all responsibility of education in all spheres, setting policy guidelines. Each level of the system of education is subordinate to the one that is above it.

Even though educational administration is centralized to an extent that major policies and lines of action are formulated by the Ministry of Education, there is a substantial degree of decentralization which permits important decisions to be made at various levels of governmental structure suitable to regional and local conditions. This provides the local revolutionary committees

with an authority to carry out functions within limits set by the higher authorities and within the context of unity provided by the structure of the Party.[313] Reference to the Party views and the Party decisions is made in order that common ideological and political policies may operate throughout the administration at all levels.

5.1.5 Post Script

The death of Mao Zedong (9th Sept. 1976) resulted in a powerful struggle within the Chinese leadership, and with the arrest of the 'Gang of Four' (Mao's wife Chiang Ch'ing, Zhang Chun-qiuo, Yao wen-yuan and Wang Hong-wen, the four leaders associated with Mao) new leadership emerged embarking on a policy of 'modernization'. Under the leadership of Deng Xiao ping and Hua Guofeng, China has changed her political and ideological stance with regard to the four modernizations (of agriculture, industry, national defence, science and technology). The idea behind this is to develop China so that it can compete more effectively with technologically advanced nations. Hence reorganization of education was seen as the key to achieve the goal. In connection with the modernization policy, the Minister of Education in April 1978 outlined the educational plan, and explained that to build a powerful socialist state implementing the four modernizations, the scientific and cultural level of the entire Chinese nation must be

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[313] R.N. Montaperto et al.: op.cit. p.71.

elevated.[314]

This goal could be achieved by realising standards and laying a solid foundation for spreading development. Within the new educational framework, major changes have been in the area of priority schools or key schools and institutions, selection procedures for admission to tertiary institutions, status of teachers, curriculum, expenditure on education and productive labour.[315] Mao's basic concept "education must serve the proletarian politics" or "produce workers with socialist consciousness and culture" has been retained. The dominant theme of expanding access to education, making schooling responsive to the state and the people, still remains.

As Deng Xiao-ping has stated: "Our schools are places for training competent personnel for the proletariat",[316] the focus is now on raising the quality of education and so, academic excellence is reintroduced as a primary goal of education in China. The present leaders claim that the philosophy of putting 'politics in command' in the past had been pushed far too much to the destructive ends, and as a result of this philosophy, academic standards had fallen so low as to allow China to "waste an entire generation of its

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[314] S.R. Buttler and P.J. Sheehan: "Changes in Chinese Education Since the Death of Mao Zedong". Canadian and International Education, 8:2:1979, p.47.

[315] Ibid. p.48.

[316] R.F. Price: Education in Modern China. 1979, p.295.

intellects".[317] Ralph W. Tyler, who recently served as a leader of the 'United States Education Leaders Delegation to China' summarized the conclusions of the report of the entire delegation and offered his own observations on the efficacy of Chinese approach to education in the post-Mao era. He claims that the criteria of proletariat background, excellent work record and devotion to continuing revolution used in Mao's period for admission to university, provided opportunity for many peasants and workers to achieve higher education. However, he maintained that since the majority of this group was comprised of 'activists', they were not interested in the abstract ideas and theories, or utilzing their full effort to become scientists, mathematicians, linguistics or philosophers. Therefore, Universities were not producing intellectual leaders required to make China a leading industrial nation and a world power by the 2000[318] which was in fact, the goal of Mao's educational policy. In view of such an observation, it appears logical that China is once again undergoing a period of transition which is not a rejection from Mao's policy, but in a way, a modification of it to achieve advancement.

Recent reports about changes in China indicate that within schools, the proportion of time spent in productive labour has been reduced at all levels so as to devote extra time to achieve quality education. Buttler and Sheehan cited

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[317] R.N. Montaperto et al.: China's Education in Flux. 1979, preface p.ix.

[318] Ibid. p.165.

an example of 'Red Guard Primary School' in Guilin, Province of Guax in which junior students do not participate in productive labour per se, but the senior students work for four weeks per year with the local production teams or in a nearby factory. Similarly, at Jilin University, the students engage for two weeks in production labour every four years.[319] The emphasis is now on promoting greater interest in the intellectual study than had previously been the case. It is difficult to assess whether this policy has been implemented in all schools in China. However, productive labour is still the main tool in China for continuing revolution.

Students are now required to write an entrance examination for admission to college or university. 20-30 percent of all college admissions are reserved for upper or middle school graduates who are now allowed to enter college directly from the middle school without having to experience two year manual labour. Mathew Zachariah of the Calgary University, who visited China recently, noted that those students directly admitted were expected to meet the two year labour-service experience during vacation and other appropriate times during their college careers.[320] Regulations also recognize the need to provide opportunities for millions of youth who had been sent to rural areas

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[319] R.S. Buttler & J. Sheehan: op.cit. p.55.

[320] Mathew Zachariah: "Mass Liners" versus "Capitalist Roaders" in China's Education Ring: Round Four to Capitalist Roaders?" Comparative Education Review, 23:1:1979, p.108.

during and since the GPCR. Therefore, 70-80 percent of the students entering college are those with experience[321] which is an indication of 'education serving the proletarian interest'. Efforts are being made to prevent the reemergence of an intellectual elite of the sort that had characterized the pre-revolutionary China. This is done by allocating quotas for admission to universities on the basis of class origin, geographic location and schools. However, all university students coming directly from middle schools, or from factories or communes with work experience have to pass academic and physical examinations and to have a good political reputation.

In spite of these changes, many of the 'ideas' and reforms that emerged and spread during Mao's period are still being implemented, although the degree of implementation may have been reduced. Urban youths are still being sent to the countryside after the graduation from middle school, not only to learn and internalize proletarian values, but more specifically to reduce urban employment; medical schools train barefoot doctors, and teachers and professors and white-collar workers are still engaged periodically in manual labour to achieve a status of egalitarianism. Work-study education is a way to enable the Chinese to merge their individual ambition with the collective goals of the Chinese Revolution.

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[321] R.F. Price: "Educating Successors To Which Revolution in China". Canadian and International Education, 8:2: 1979, p.44.

Through the system of work-study education, China has been able to develop her economy, utilizing labour-intensive methods rather than capital-intensive ones. It has been able to produce large numbers of skilled and semi-skilled manpower, low and middle-level technicians and para-professionals - a large human force with socialist consciousness committed to hard work. The educational policies concentrating on the practical application and incorporating labour in curricula produce excellent short-term results spreading scientific knowledge and modern attitudes about applying innovations among the rural peasantry, however such policies neglect long-term training and research needs. To maintain a long-term modernization programme, it is essential for China to produce an increasing supply of top quality research scientists, engineers, managers and other professional specialists.

The massive human force possessing modest levels of specialized skills and knowledge that man Chinese fields, factories and service sector has become capable of serving the majority. However, if it wishes to compete with the western world, it cannot meet the needs for an emerging modernized China. Therefore, having laid a foundation of skilled manpower committed to socialism and a desire to serve the majority, China's attempt towards modernization is logical in view that it needs its own technologically advanced manpower so as to avoid any dependence on foreign advanced nations and their domination. It is too early to

predict the consequences of the new educational policies, but it is possible that China may serve a unique approach if not a model for other Third World countries and, especially for those pursuing socialist policies.

5.2 Radio Study Group Approach To Mass Education Campaigns in The Republic of Tanzania

5.2.1 Backgroud on Tanzania

Tanzania, formerly Tanganyika, achieved its independence in 1961 having been a British Colony since 1918 and before that a major part of German East Africa. The United Republic of Tanzania is now the largest country in East Africa with an area of almost a million square kilometres and a population of about 13 million. Of this, 99% are Africans, the remaining 1% being persons of Asiatic descent and a trace of Europeans.[322] In ethnic terms, Tanzania is unique in sub-saharan Africa. There are large numbers of ethnic groups, about 120, but none are large enough or powerful enough to dominate the national political life. The most important social unit in the tribal society is the extended family. Most people live in the scattered settlements in rural areas as subsistence farmers. Pastoralism and crop husbandry form the main occupation of people.

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[322] Budd L. Hall: Adult Education and Development of Socialism in Tanzania, Kapala: EALB, 1975, p.18.

The national language of Tanzania is Swahili (Kiswahili) spoken by 85% of the population and understood by 95%. English is still of major importance. The urban population constitutes 5% of the total population. The vast majority of Tanzanians, 95% live either in villages or in isolated homesteads. The most purvasive communication networks in rural Tanzania are the Ten-House Cell System[323] of Nyerere's political party, the Tanzanian African National Union (TANU).

By most conventional measures of national wealth, Tanzania is a poor nation suffering from low incomes, high mortality rates and low levels of service provision. Further, her economy has not developed in a way which would reduce the impact of world fluctuations in the primary commodity prices or the need to decrease Tanzania's reliance on foreign aid and high levels of food imports.[324] With a per capita GNP of $260 in 1979, Tanzania falls into a category of 36 low income countries in the world. Using the index of economic development worked out by Harbison, Maruhnic and Resnick, Tanzania ranks 21st out of 31 sub saharan states which they compared.[325] Since 1967, the greatest aspect of Tanzania's economy has been the

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[323] Ten-house cell system is an organization. Each 10 houses constitute a cell each of which elect its own leader to represent it at higher levels. The cell leaders play an important role in communicating the needs of people to the government and vice versa.

[324] Bill Williamson: Education, Social Structure and Development. London: Macmillan, 1979, p.127.

[325] Harbison, Maruhnic & Resnick: Quantitative Analyses of Modernization and Development. 1970, p.18.

nationalization of major means of production. Despite many economic problems, under the leadership of Nyerere who is influenced by China' development model, Tanzania has developed an extremely distinctive philosophy of development and a set of policies designed to ensure that her philosophy becomes a reality. This ideology involves a socialist conception of development giving priority to rural areas and to break the bonds of dependency through a commitment to socialism. The objective of socialism in Tanzania is:

> "to build a society in which all members have equal rights and equal opportunities, in which all can live in peace .....without suffering or imposing injustice, being exploited or exploiting, in which all have gradually increase level of material welfare before any individual lives in luxury."[326]

It is this socialistic ideology that after the Arusha Declaration[327] in Dec 1967, Tanzania adopted the policy of "Ujamaa Villages" as a main strategy for rural transformation. According to Nyerere, the Ujamaa village:

> "is or will become an economic, social and political unit. Its people will not only produce their crops together so that they talk of 'our shamba' and 'our output'; they will also run their own affairs, supervise their own schools, organize the improvement in their own living conditions and become a community for all purposes".[328]

Thus by the successful establishment of ujamaa villages, the country hopes to solve the problems of rural

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[326] J. Nyerere: Freedom and Socialism: A selection from writings and speeches 1965-1967. Dar es Salaam Oxford University Press Nairobi, 1968, p.340

[327] It was a declaration that outlined a socialist development strategy and policy of self reliance for Tanzania.

[328] J. Nyerere: Tanzania Ten Years After Independence. Dar es Salaam, Government Printer, Sept 1971, p.41.

underdevelopment on the basis of co-operation, self-reliance and the spirit of socialism among villagers. On an average in 1970, only 50% of the children of school going age had places in primary schools and illiteracy among adults was high. Lack of education among adult creates a situation of instability, fear and lack of confidence. Nyerere says that "illiterate people will never be able to play their part in the development of their own country or themselves and they will always be in danger of being exploited by the great knowledge of others". Therefore, adult education in particular has a central role in the national development.

Tanzania has committed herself to socialistic development laying a major emphasis on increasing consciousness and skills among the masses provided through adult education. Tanzania's ideology demands popular participation in decision-making with respect to both the formulation of development plans and to the implementation of development policies. In order for this to become a reality Nyerere has spelled out the objectives of adult education:[329]

1. To shake ourselves out of a resignation to the kind of life Tanzanians have lived for centuries past;
2. To learn how to improve our lives:
3. To understand our national policies of socialism and self-reliance.

There is a variety of programmes that are being carried out by different agencies in the field of adult education to

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[329] Budd L. Hall: Participation and Education in Tanzania. IDS Discussion Paper No.86, Nov., 1975, p.5.

achieve these objectives. All the adult education programmes will not be discussed; however, the radio study group campaigns in Tanzania will be examined with special reference to Mtu ni Afya (Man is health) - a mass health education campaign, its objectives, organization, methodology, evaluation etc. to see how far this national campaign has been successful in achieving its development goals. Reference will be made to the previous campaigns wherever necessary.

5.2.2 Approach to Mass Education Through Radio

Majority of Tanzanians live in villages. The rural population is also the poorest in spite of the fact that the country's major source of income is farm products. The education of millions of farmers scattered over a truly vast country in the use of improved farming methods, new high yielding seeds, fertilizers, insecticides, safe storage and economic marketing, is a great task. It would require a large number of trained instructors and a densely knit communication network, but it is unavailable and is unlikely to be available in Tanzania for a long time. The only way to reach the villagers is through "radio" and one can certainly communicate ideas and facts via the spoken word transmitted to the many transistor receivers found in villages.

Wilbur Schramm notes that the growth of radio has been dramatic. About 100 million of approximately 144 million radios in the three great developing regions of the world

were added between 1963 and 1973. It was a decade of "The Transistor". In Latin America, the number of radios more than doubled, in Africa more than tripled and in Asia it was quadrupled. An unknown, but large percentage of these radios is now in the villages. A conservative estimate is that one third to one fourth of all people in developing nations now have direct access to radio broadcasts.[330]

The importance of radio was realized by educational planners who began to wonder whether unstructured and unorganized listening has any value. If valuable, then how could one measure the effects and obtain relevant feed back from the listeners? If radio listening is organized and a system of evaluating the studies is found, then radio could become an important instrument for the dissemination of knowledge to rural areas. The radio audience in Tanzania was estimated in 1968 by Mytton,[331] at approximately eight million people. A very large percentage of these listeners was in rural areas. Erickson's study indicated that the ratio of radio programme listeners in rural as against urban areas was 64% to 51%.[332] Various agencies make use of radio for educational purposes. Radio Tanzania has a division of Adult Education that stimulates the production of

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[330] Wilbur Schramm and Daniel Lerner (ed) Communication and Change the Last Ten Years - And the Next. Honolulu: University Press of Hawaii, 1975, p.3.
[331] G. Mytton: "Tanzania: The Problems of Mass Media Development". Gazette, Vol. XIV, No. 2, pp.89-100. quoted in Budd L. Hall: Adult Education and the Development of Socialism in Tanzania. 1975, p.113.
[332] Evan Erickson: "A survey of Radio Listernership of Political Education Course". 1973, p.2, quoted in Ibid.

educational materials and co-ordinates the programmes which are produced for them by the agencies themselves. The Ministry of Health, the Ministry of Agriculture, the Co-operative Union of Tanzania, the Ministry of Information, The Prime Minister's Office, TANU, Kivukoni College and The Institute of Adult Education have programmes which are broadcast over the "national service", the term given to the educational or information broadcasting frequency.[333]

At independence, Tanzania had six studios and one transmitting station. The transmitter's total power output was only 38.75 kilowatts. Now Radio Tanzania has eight studios and three transmitter sites with total power output of 242.25 kilowatts, more than six times that of 1961. Radio Tanzania can be picked up throughout the country and beyond the borders. The Tanzania Broadcast has been taken over by the Government of Information and Tourism. Radio Tanzania carries broadcasts to schools for two hours everyday during the school year. On Sundays and public holidays, Radio Tanzania is on air for atleast 33 broadcasting hours a day, a tremendous increase over the 1962 output of only 15 hours per day. The potential number of listeners of Radio Tanzania is estimated to be over nine million people.[334] Thus radio is a major source of information and hence could be a powerful educational tool for listening groups in that

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[333] Budd L. Hall: op.cit. 1975, p.114.

[334] E.E. Kaungammo: "Information Series and Radio Tanzania informing the nation". Tanzania Notes and Records, No.76, 1975, pp.127-128.

country.

5.2.2.1 Listening Groups

When a group of adults meet together on a regular basis to discuss radio or television programmes, the group is called a listening group.[335] It is conducted usually under the leadership of a lay person and sometimes with the assistance of supplemented printed materials and with arrangements or two-way comunication (feed back) between the listeners and the broadcasters. Educational researchers credit the listening groups approach with the ability to spread the learning of factual material effectively on a mass basis, to promote the development of desired attitudes, to increase an interest in various subject matter areas, and to affect motivation toward group and individual action. Most mass communication researchers agree that there is a potentially great educational and persuasive power in the combination of broadcast followed by small group discussion supplemented by printed materials. Some political scientists and public figures believe that a listening group movement could be an important element in moving towards more direct democracy in an age of pervasive mass media. In 1954, Blakely referring mainly to the listening group project, stated that:

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[335] See John Ohlinger: Listening Groups Mass Media in Adult Education. CSLEA, Report, 1967.

> "This huge subject is perhaps the most important and promising frontier of adult education today. It is an attempt to combine the impact, flexibility, economy and range of the mass media, on the one hand, with the educative process of personal participation (reading, reflection, the exchange of ideas and information, and the formulation and testing of conclusions) on the other hand. Vigorous experimentation is going on in this field."[336].

Tanzania had been motivated by this method and The Institute of Adult Education (IAE) has been for some time experimenting with the method of radio study groups.

5.2.3 The Concept of A Radio Study Group

The radio study group campaign belongs to the historical educational pattern that contains both the organized listening group and the study circles or study group. There are elements of both of these educational strategies in the practice of radio study group campaign. As with the other forms, radio study group campaign operates on the assumption that for learning to take place, dialogue must occur not only between the group leader and the members, but also among all members of the group. This method rejects the authoritarian role of the teacher and stresses that the group leader is trained only in stimulating and co-ordinating the study of members, but is not an authority on the subject being studied. This style of education through dialogue more nearly fits the Tanzanian ideology of development. The 1971 TANU party guidelines

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[336] Robert Blakely: "The Citizen of the Mass Media". in John Ohlinger: Listening Groups: Mass Media in Adult Education. CSLEA Report, 1967, p.2.

states that, "If development is to benefit the people, the people must participate in considering, planning and implementing their development plans".[337] Radio study group is consistent with the desire to give people a chance to discuss and express themselves about issues concerning their own future.

The concept of radio study group was used in Tanzanian adult education programme, first on experimental basis on a small scale and gradually leading to the organization of a mass education campaign covering a large group of people all over the country.

5.2.3.1 Historical Development of the Mass Education Campaign

The idea of radio listening group was born in Tanzania in two different institutions and at the opposite ends of the country approximately at the same time. The co-operative Education Centre (CEC), Moshi founded in 1964 to cope with the needs for on-the-spot education for the members of Tanzanian's co-operative societies, decided very early in its life that its purpose would be achieved solely, or even in the main part, by face to face education methods. So it began to experiment with simple correspondence study guides. Majority of the people of village-level Tanzanian co-operatives have had no formal schooling and therefore,

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[337] TANU: TANU Party Guideline (Mwongozo) Dar es Salaam, Govt. Printer, 1971.

printed materials could only be used through literate members of co-operative groups reading them aloud to their illiterate colleagues. The CEC decided to support these courses by radio programmes which presented the essential ideas and information in an oral form. These two methods, the radio series and study letters (as correspondence pamphlets were called) were combined with the organization of study groups, modelled to a large extent on the study circles common in the Swedish labour and co-operative education.

The first such tentative campaign was organized in 1967 by the CEC, Moshi, which launched a radio series "Jifunze Ushirika" intended for the members of the Co-operative Primary Societies and any other interested farmers.[338] By the end of 1968 about 400 such groups were operating through co-operative secretaries and unions in various parts of Tanzania. A second experiment in Radio Study Group was run in the latter part of 1967 by the Institute of Adult Education (IAE) in Mbeya Region. Three radio courses were broadcast, "Agriculture in Tanzania", "Government in Tanzania" and "English at Work". These study groups were 20 in number.[339] The radio study group programme was broadcast every Thursday at 4.30pm and repeated every Saturday at 2.30pm on Radio Tanzania Swahili Service (359 meters, 31.48 meters & Saturday only on 41.87 meters). This was before the

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[338] Tony Dodds: "Radio Study Group: Self-Help Adult Education for Rural Development". Mbioni, Vol:5 No: 5 & 6, 1969, p.70.
[339] Ibid. p.71.

IAE began the series explaining and illustrating Tanzania's Second Five Year Development Plan.[340] However, in 1969-71, the Institute of Adult Studies, University of Dar-es-Salaam and the CEC organized experimental radio campaigns which centred on important national events. First, in 1969 there was an introduction of the Second Development Plan which indicated in some detail how the concepts of Ujamaa (co-operatives) and the tenets of the Arusha Declaration would be put into practice. This campaign had about 100 groups.

The second event was in 1970, the year of the Presidential and Parliamentary election and had a larger campaign of about 250 groups. This campaign was focussed on the importance and meaning of election, procedures and rules and what to look for when voting for a constituency candidate.[341] The third project, larger than the previous one was based on the achievements of ten years of Independence. It was planned and organized with the help of adult education and was called "Wakati wa Furaha" (Time of Rejoicing). This campaign was an attempt, first to create a deeper sense of national awareness; second, to help people feel that whoever they are, whatever they do they are all Tanzanians; third, by tracing the development of Tanzania from the distant past up to the present day and by

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[340] Ibid. p.75.

[341] Paul J. Mhaika: "Political Education and Adult Education". in Adult Education and Development in Tanzania. Volume I, Edited by Budd Hall: 1975, p.55.

highlighting the achievements since independence, help Tanzanians to feel joy in their accomplishments. This campaign had 2,000 organized groups.[342]

After these experimental study group campaigns, a decision was made to launch a campaign that would result in direct action to improve the lives of people living in rural areas. An educative programme as Nyerere says would "enlarge man's understanding, activate them to make their own decisions and implement those decisions themselves".[343] After discussing the matter with the various ministries and organizations, it was agreed that a large-scale preventive education would be most appropriate. Thus on the experience of previous radio study groups, health education campaign - "Mtu ni Afya" (Man is health) was planned and organized in 1973 as a mass education campaign.

For the first time this campaign was action-oriented geared not just towards learning, but towards marked changes in individual and community behaviour arising from that learning. This campaign involved the integration of three media: radio, the printed materials and face to face discussion.

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[342] Ibid.

[343] J. Nyerere: "Liberated Man: The Puropose of Development". Convergence, Vol.9, No.4, 1976, p.12.

5.2.4 Aims and Objectives of the Campaign

All the previous campaigns had been the training ground and pilot projects for the massive undertaking of mounting a truly national health education campaign.[344] It was more ambitious than the previous campaigns and was aimed at operating in every region. This campaign was planned as a part of Tanzania's health strategy so that more emphasis could be placed on community medicine, on building up a healthy environment and preventing disease from occuring rather than only on curative services which leave the population's attitudes and habits regarding health, unchanged. Therefore, Mtu ni Afya - a mass education national campaign was aimed at raising the health consciousness of people by teaching adults, the basic health principles in study groups in the hope of generating an initiative to take up measures against the most common diseases in Tanzania and improve their lives.[345] Such a campaign which is directed at improving the daily lives of people, becomes very effective once the people are involved in its comprehensive and integrated planning and implementation. The Republic of Tanzania in 1973 spelled out three specific objectives for this campaign:

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[344] For a general account of the campaign see Budd Hall: "Mtu ni Afya: Mass Health Campaign". Convergence, 1974. For a detailed account see B. Hall and T. Dodds: Participation and Education in Tanzania. IDS Discussion Paper 86. and Voices of Development: Tanzania Radio Study Group Campaign. World Bank Working Paper 226.

[345] Fr.D. Mbunda: "Adult Education and Socialist Development". in Budd L. Hall (ed): op.cit. 1975, p.43.

1. to increase participants' awareness and encourage actions that groups and individuals can take to provide information about their own better health;
2. to provide information about symptoms and prevention of specific diseases;
3. to encourage the maintenance of newly acquired skills of literates and neo-literates by providing suitably written follow-up materials to those who have participated in the national literacy campaign.[346]

5.2.5 Preliminary work of the Campaign

All the work of the campaign was to be ready before the campaign was officially inaugurated in April 1973 so every thing was planned 18 months in advance (the preparatory work of this campaign was similar to the "Wakati wa Furaha" which is given in Figure II.) The preliminary work consisted of:

1. writing of a text book and study guides, editing, printing, binding, and distribution;
2. Radio tape collection, production of radio programmes;
3. Organisation of study groups.
4. Recruitment and training of group leaders.
5. Publicity of the Campaign.

5.2.5.1 Publicity

In order to make a mass campaign successful, it is necessary to seize every opportunity for publicity. In the case of Mtu ni Afya, a series of publicity programmes and short announcements were prepared for the national and commercial radio services. All newspapers were kept abreast of developments and a special supplement in the National Daily News and the Kiswahili Daily Uhuru was prepared.

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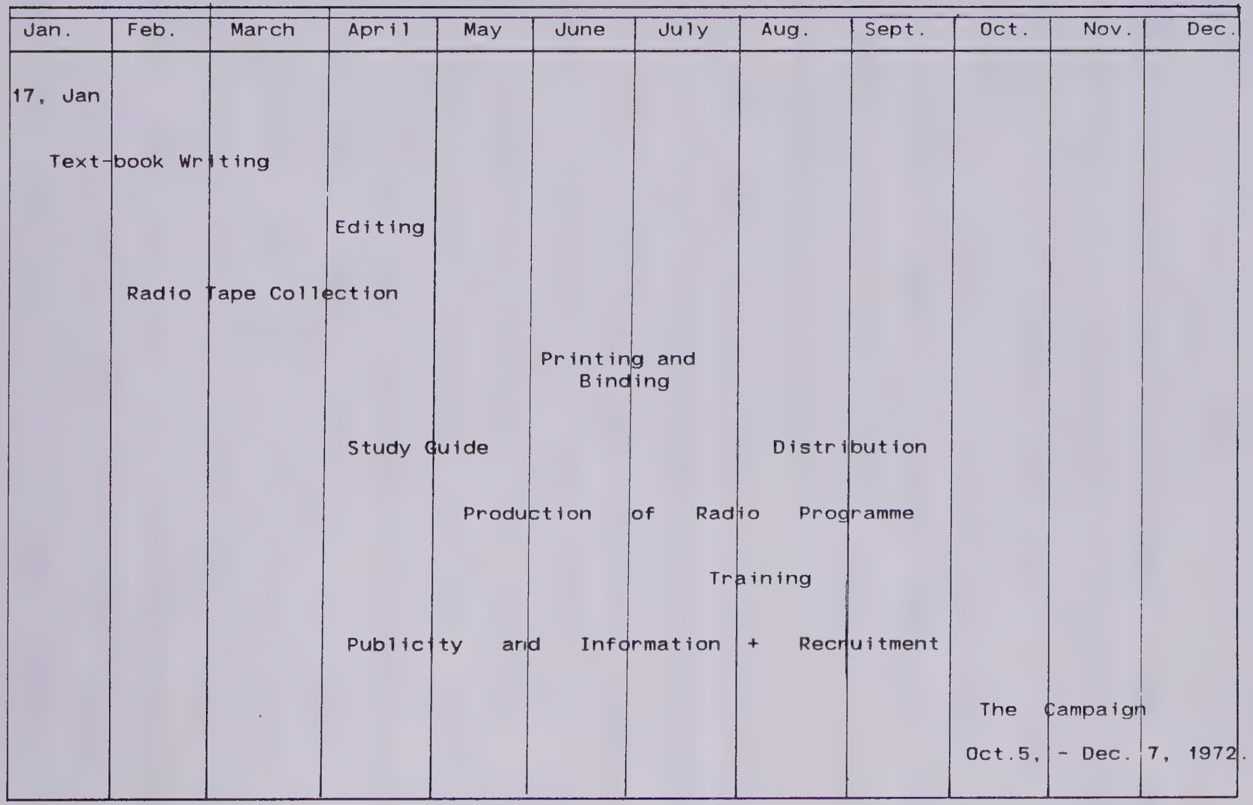
[346] Lalage Bown and S.H.Olu Tomori: A Handbook of Adult Education for Africa. Hutchinson University Library for Africa, 1979, p.150.

Figure II.

Preliminary Work Schedule of "Wakati wa Furaha".



Source: Budd L. Hall: Wakati wa Furaha: An Evaluation of Radio Study Group Campaign. 1972, p.11.

In the case of Wakati wa Furaha, an 'information kit' was prepared which consisted of a five page manuscript covering all the main aspects (aim, study materials, training etc.) pocket notes to be used by the speaker and detailed instructions of how the presentation should be done (introductory talk, group work etc.). The kit was distributed in separate kiswahili and English version in about 400 copies to DEO's of Adult Education, Ministries, organizations such as TANU, National Services and Co-operative Education Centre.[347]

In the case of Mtu ni Afya, publicity was sought and given by the CEC through its weekly radio programmes. Prior to and during the mass health campaign, there were other campaigns in operation in the fields of agriculture, literacy, political awareness etc. carried out by other agencies which helped with publicity. The Health Education Unit and the Ministry of Agriculture also made announcements of the programme on their radio time. In addition, posters were produced and distributed through more than 2000 training seminars. Grenholm noted that at first, Mtu ni Afya organizers were reluctant to spend their scarce funds on poster production. They gave in to the wishes of field officers and the set of six crude posters that were

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[347] Budd L. Hall: Wakati wa Furuha: An evaluation of Radio Study Group Campaign. Dar es Salaam University (Tanzania), IAE, 1972, p.21.

produced, proved to be quite an asset.[348] The strongest boost to the campaign came from the office of the Prime Minister, Rashidi Kawawa who made two national speeches stressing the importance of full participation in the campaign.

The most unique publicity came from the Friendship Textile mill of Dar es Salaam which agreed to make several designs of cloth that emphasized aspects of the Mtu ni Afya campaign. Alltogether, three designs in several colours were produced for commercial use. When made into wrappers, shirts or dresses, the cloth provided most attractive advertising space.[349] Thus, before the radio programme actually began, there was enough publicity and everyone was aware of the campaign. It may be because of good publicity, that more than the set target of clientele registered in the programme.

5.2.5.2 Production and Distribution of Printed Material

The idea of the campaign had emerged from the discussions among the various ministries and organizations. Tentative planning was done by the members of Publication and Radio Department of IAE. This team consisted of publication editors and their assistants, radio tutors and their assistants and qualified adult educators who were in charge of the training programme and study materials. The

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[348] L.H. Grenholm: "The Study Group Approach to Mass Education". in Budd L. Hall (ed): op.cit. 1975, p.100

[349] Budd L. Hall: "Mtu ni Afya: Mass Health Education Campaign". Convergence, Vol.7, No.1, 1974, p.72.

material for the health campaign was produced at the writers' workshops run by the Ministry of National Education, Adult Education Division and the IAE under the Mass Education Department.[350] Text books were written in Swahili with a synopsis in English. The textbooks were printed in Tanzania itself to avoid the unforeseen difficulty that was caused during the "Wakati wa Furaha" campaign when the books were printed in Nairobi and were held up for two weeks in customs procedure, and delayed their delivery to the study groups.

It is a policy that study materials in adult education be provided free of charge, and consequently every registered group was supplied with books and study guides as per the indicated numbers. The study guide meant to help and guide the group members in their work. It explained the aims of the campaign, described the functioning of study group and presented the various study materials. It also made recommendations for each group meeting. Since the enrolment in the campaign exceeded the set target, there was certainly a shortage of supply of books to some groups.

5.2.6 Clientele

Mtu ni Afya being a mass campaign was designed to reach one million adults in Tanzania. Unlike the previous one, "Wakati wa Furaha", whose target group was 20,000 and less.

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[350] E. Mwasada: "Writers' workshops - an experience on follow-up reading materials from Tanzania". Adult Development, March, 1980, No:14 p.32.

As the danger of contagious diseases was greater in ujamaa villages[351] than other more scattered rural communities, the main target was approximately 750,000 adults living in Ujamaa villages and a further 25,000 adults in the six districts in which adults had already attended national literacy campaign in 1972. These districts were Ukereqe, Mafia, Masasi, Pare, Kilimanjaro and Dar es Salaam.[352] When the campaign began, the actual number enrolled was two million, twice the target (planned target was one million).

Each group was scheduled to have between 15-20 members. The maximum number for meaningful discussion was considered to be 20, but as in the earlier campaign, many groups were reported to have substantially exceeded this size with some having a membership of more than 100. In some cases like the one in Wakati wa Furaha in Morogu district, there were 230 members in one study group. All 230 members met together in order to listen to the radio broadcasts and then divided into 20 smaller groups in order to have discussion.[353] The clientele included both men and women. The ratio of men to women is indicated to varied a great deal from district to district. The percentage of men and women in the health campaign is unknown, but the difference could have been small. The overall percentage of "Wakati wa Furaha" was 62%

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[351] villages, where the scattered rural population had been drawn together and organized on a co-operative basis.

[352] James Sheffield and Victor Diejomoah: Nonformal Education in African Development. New York, African-American Institute, 1972, pp.109-117.

[353] Budd L. Hall: op.cit. 1972, p.36.

men and 38% women.[354] The percentage of men was more than women and this could be due to the fact that men were (are usually) more interested in politics than women. The age of participants ranged from 16-40 and their level of education was standard IV or less (68.4%)[355] with 13.6% having completed standard VII. Most of the group members were farmers (72%) and less than 10% consisted of artisans, civil servants, office workers and others.[356] Therefore, the main target of this campaign was the rural population which was organized into study groups.

5.2.7 Organization of Radio Study Groups

To organize a radio study group all that is required in theory at least is a group of people wanting to listen to a series of radio programmes. The study group is organized by some local organizations - be it an Adult Education Association, Co-operative Society, a TANU Branch - which can bring a group of interested people together, arrange for the meeting and make sure that a radio is available in good condition. The organization bears the responsibility of encouraging members to meet regularly, especially in the latter part of the course when the first wave of enthusiasm gets worn off. Through its own regional and central organization, the local organization maintains contact

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[354] Paul J. Mhaiki: "Political Education and Adult Education". in Budd L. Hall (ed): Volume I, op.cit. 1975, p.55.

[355] Budd L. Hall: op.cit. 1972, p.43.

[356] Ibid. p.44.

between the group and the agency relaying the broadcasts. Then from the group, a leader is chosen who can lead the study group in an interesting and stimulating discussion based on the programme. The group leader does not necessarily have to be an expert in the subject-matter of the radio course, except that he should be able to plan and conduct the discussion, to command the group's respect, be sensitive enough to the group members, and be able to involve them all adequately in the discussion. An efficient group leader can make the group meetings into worthwhile educational activities by his handling of the discussion while an incompetent group leader will almost certainly make the group fall apart.

The educational concept central to the mass campaign is that of discussion. It is essential that the educational process enables participants not only to learn effectively but to relate that learning to their own situation and to become aware of their own ability to change their environment. Participation through discussion and later through action is therefore crucial and this kind of activity is very different from that which most learners previously have had experienced in school or even in traditional literacy classes. The effectiveness of the discussion process is critically dependent on the skill, initiativeness and sensitivity of group leaders. Therefore, the first major condition for the effectiveness of the programme had been the training of such leaders.

5.2.7.1 Recruitment and Training of group leaders

Leaders for Mtu ni Afya were recruited in a variety of ways. Some were elected by educational groups already in existence for other purposes; some were TANU ten house cell leaders.[357] some were recruited through mass-media publicity, which stressed the point that if an individual felt that he or she could organize a group of 10-15 people, he should contact the district adult education officials for details of training seminars, and some were selected by the grass-roots adult education organizers.

One of the most important reasons for training group leaders is to convey the message that group leaders are not teachers. A leader does not tell the group what to do or how to do it. The group leader is given training to guide group studies, to understand that he is only 'first among equals'. He is trained to encourage the withdrawn, subdue the over dominant and generally stimulate full participation in the discussion. It is equally important to provide suggestions to leaders on how to move from discussion to action in the groups.[358]

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[357] TANU is the political party. Its local organization is based on cells of 10 houses each of which elects its own leader to represent it at higher levels.

[358] Budd L. Hall: Participation and Education in Tanzania. IDS Discussion Paper No.86, Sussex University, Nov., 1975, p.14.

5.2.7.2 Staged Training System

More than 750,000 group leaders were trained between December 1972 and April 1973. In order to provide two to three-day seminars for each of these study group leaders, a staged training system was devised (See Figure III.). There were seven regional seminars conducted for 240 participants (30 per seminar). This training team included officers from the Mininstry of Health and Staff responsible for co-operative education. They were given an orientation on the study group method and the Mtu ni Afya campaign. This regional team of 240, conducted 70 district level seminars in 61 districts for 3,000 participants (25 per seminar). The 3,000 participants at the district level included the district adult education officers, rural development officers, agricultural officers and people from voluntary agencies. The district teams in turn, in the third stage, held about 2,000 divisional seminars for roughly 75,000 study group leaders (37 per seminar).[359] The group leaders at the division or ward level were not always literate as this was not the requirement. They were elected by the group. The seminar at the group leaders' level was mainly on dialogue and discussion so that the group leaders would employ the same approach in dealing with their groups.

The importance of such training programmes was to ensure that the central elements of the training message

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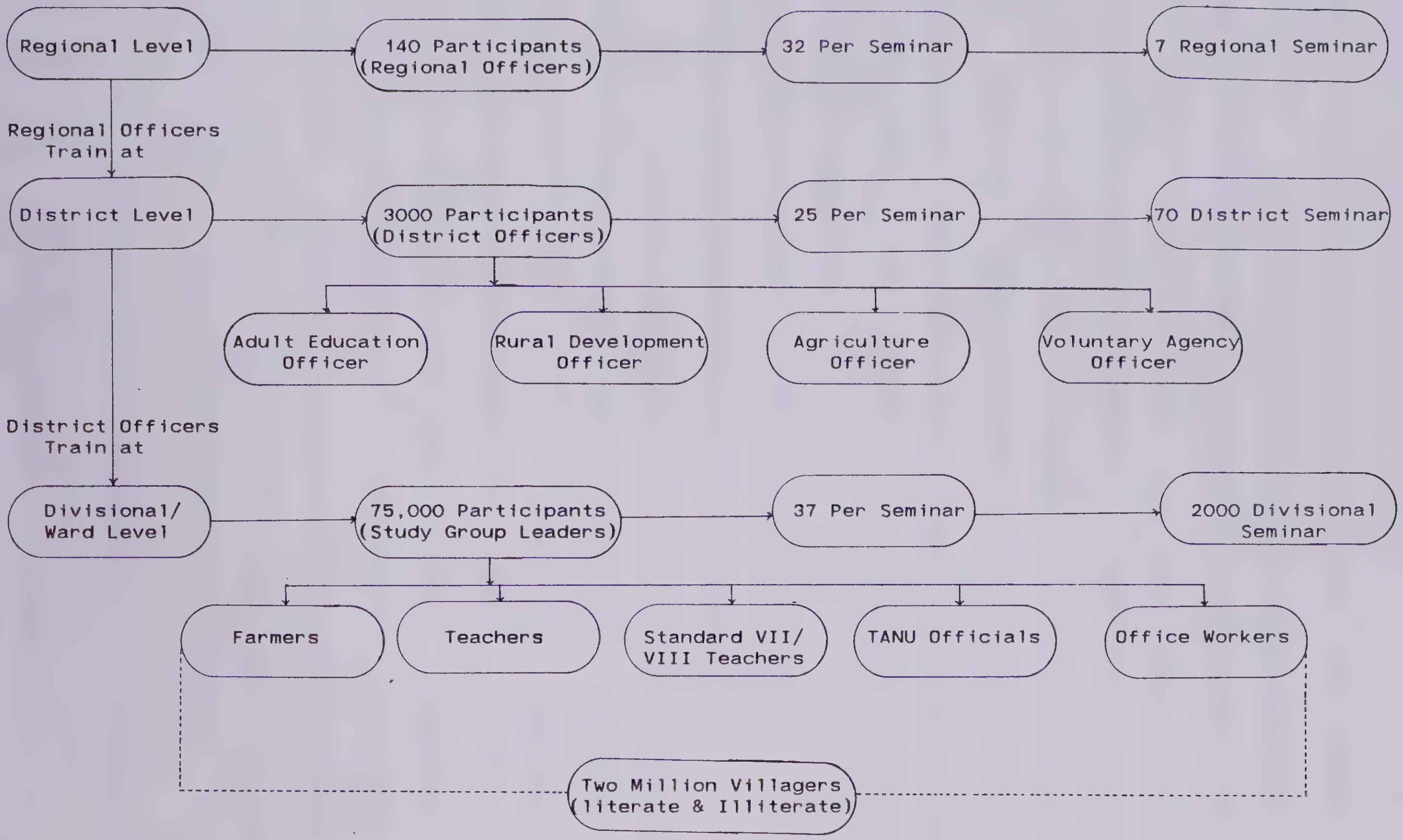
[359] P.F.K. Mtegna:"Strategies For Training Adult Educators for Rural Areas". in B.L. Hall (ed): op.cit. 1975, p.65.

Figure III.

Staged Training System for "Mtu ni Afya", Mass Health Education Campaign


Regional Level
140 Participants (Regional Officers)
32 Per Seminar
7 Regional Seminar
Regional Officers Train at
District Level
3000 Participants (District Officers)
25 Per Seminar
70 District Seminar
Adult Education Officer
Rural Development Officer
Agriculture Officer
Voluntary Agency Officer
District Officers Train at
Divisional/ Ward Level
75,000 Participants (Study Group Leaders)
37 Per Seminar
2000 Divisional Seminar
Farmers
Teachers
Standard VII/ VIII Teachers
TANU Officials
Office Workers
Two Million Villagers (literate & Illiterate)

Source: Original - Based on the Information of Staged Training System.

survive the diffusion process from the first through the last stage. That is, no vital element need be damaged by dilution. This is one of the most crucial aspects in the development of mass campaign. In the Tanzanian case the key elements of the training message were maintained by several devices: centrally prepared handouts (duplicated locally); the use of flip-over charts summarizing the most important points of training; pre-recorded cassettes of simulated radio programmes for role playing experience and copies of actual materials to be used in the campaign.[360] In these seminars they discussed:[361]

1. The purpose of the campaign.
2. Various group methods for teaching adults.
3. The content of the campaign using the booklets produced.

Different organinzations were involved in teaching of the content. The IAE, the Ministry of National Education and Ministry of Health provided tutors for training. The range of background of leaders effectively trained, suggested that a high level of education for a traditional white-collar occupation was not necessary for effective group leadership. In Wakati wa Furaha the group leaders had no more than standard VII or VIII education and 40% were farmers.[362] For

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[360] Budd L. Hall: Participation and Education in Tanzania. op.cit. 1975, p.16.

[361] P.F.K. Mtenga: "Strategies for Training adult Education for Rural Areas". in Adult Education and Development in Tanzania. Volume I 1975, p.66.

[362] T. Dodds and B.L. Hall: Voices of Development: Tanzania Radio Study Group Campaign. World Bank Working Staff Paper No.226, May, 1977, p.32.

the group leaders to operate effectively in the field they must receive adequate support and supervision. Therefore, a second major pre condition for the success of the programme is an effective organizational network.

5.2.8 Organizational Network

Tanzania has built a wide spread adult education network under the administration of Ministry of National Education. It is composed of nearly 2000 national, regional, district and divisional adult educational co-ordinators and supervisors. These personnel are responsible to the thousands of adult education centres which operate using primary school as bases. They are paralled by a network of health education officers. Both sets of personnel were largely responsible for the day to day operation of the mass campaign, from the training of group leaders to providing encouragement during broadcasting. They were supplemented by the network of TANU and the Rural Development Division.

The Planning for the health education campaign as stated earlier, began 18 months before the first radio broadcast went on air. It was carried out under the guidance of a nationaly co-ordinating committee. The IAE, the Ministry of National Education (Director of Adult Education), TANU, the Ministry of Health and Social Welfare (Health Education Unit) and the Prime Ministers' Office (Rural Development) were represented on the co-ordinating

committee.[363] This committee was responsible for mobilizing people, training study group leaders, programming the radio message, and ensuring that the information given was correct and appropriate to the largest group and so forth. Through such co-ordinated efforts, it became possible to secure the necessary funds, reading materials, publicity and trained personnel - the contributors to the success of the campaign.

The co-ordinating committee met as often as once per week during the most intense planning periods. The importance of this committee was that from the begining; as many agencies as were necessary for the success of the campaign were involved. A mass campaign at a rural level cannot be carried out by the activities of only one sector or one agency. It requires the co-ordinated efforts of all agencies working in rural areas. At the village level in this campaign, the adult education personnel worked with the rural development extension officers, the local TANU officials, health education personnel, extension agents, church leaders and even standard VII leavers in organizing groups before the campaign, and in giving the groups support once the radio programmes were under way.

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[363] Fr D. Mbunda: "Adult Education and Socialist Development." in Budd L. Hall (ed): op.cit. 1975, p.44.

5.2.9 Methodology

The Health Education Campaign utilized an integrated approach which involved the use of three media: radio, printed materials and face to face discussion. An important difference between the health education campaign and the other campaigns attempted previously was the emphasis on action by the group, both individually and communally. The time of the radio transmission was fixed and each radio programme of actual studies was preceeded by fifteen minutes of music related to the campaign, political songs and poems, answers to questions sent in by the groups and announcements from the campaign organizers. The first 15 minutes were a kind of "gathering time" for programme to give group members a chance to arrive and settle down. Then the members listened to 15-20 minutes' radio programme in which an expert or groups of experts whose knowledge and ideas could not otherwise be made available to people in rural areas, provided the information, the ideas and stimulation with illustrations.

After listening to the programme, the appropriate section from the text was read either by the group leader or one of the members capable of reading. This was followed by a discussion, first with the questions of relevance of the material presented for each particular group. The discussion lasted usually for about 40 minutes, but sometimes longer. If the information presented for the day seemed important, resolutions were made by the groups as to what they could do

to prevent the disease under discussion. After the group had met sometimes during the week between meeting times or even later, members resolved to take the action necessary either in their own homes or in the areas together with others in the group.[364]

The representatives of the campaign organizers supervised the study group in order to help the groups that might face trouble with the study method used, or might not understand some questions or overlook the need for supplementary information. The group leader recorded the proceedings of the group work and if there were any questions that were to be answered, they were recorded and sent to the centre. The answers for the questions were sent back to the group and were also answered over the radio before the next programme.

5.2.9.1 Activities of the Study Group

As the health education campaign emphasized action by the group, both individually and communally, many practical suggestions such as increasing the size of windows, building latrines, filling in the wet areas which provide breeding grounds for mosquitoes, killing snails which carry away bilharzia, clearing vegetation away from the houses were put forward for the group members to discuss. Such discussions enabled people to see that they were not simply at The Almighty's mercy or being punished by others when they

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[364] T. Dodds and B. Hall: Voices for Development: Tanzanian Radio Study Group Campaign. op.cit. 1977.

suffered from disease. It made them aware of themselves and their conditions and also made them confident that they were the builders of their own well-being, rather than dependent on others. One group member from the island of Mafia near Dar es Salaam noted, "We knew about malaria, but we never knew that mosquitoes were bringing this disease. We want to die of old age, but not of disease".[365] This is an indication of the ignorance of rural people about common facts and the knowledge which could prevent them from health problems.

In Dar-es-Salaam, the capital, the city council decided that in keeping with the Mtu ni Afya campaign, the streets should be cleared of all "street garages". This brought an immediate howl from the many mechanics who made a living in the street because they had no garages to work in. Negotiations brought a compromise and a vast clean-up campaign was launched with the groups promising a radical improvement in their hygiene. In Bukoba, near Lake Nyanza, the city officials agreed to close the markets each week during radio broadcast time so that the employees and employers could listen to the broadcast and practice cleanliness.[366]

In one of the study groups, the members after having listened to the radio broadcast on the symptoms of

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[365] "Institute of Adult Education Preliminary Report of the Mtu ni Afya Campaign". Mimograph, Dar es Salaam, IAE 1973, in Budd L. Hall: Adult Education & Development in Tanzania, 1975, p.78.

[366] Budd Hall: op.cit. 1974, p.73.

Tuberculosis (TB), began discussing whether or not these symptoms were present in their village. They soon realized that one of the members in the group seemed to have those very symptoms. After much discussion and deliberation, the group decided to collect money and send their fellow member to the nearest hospital for diagnosis and treatment.[367]

The emphasis in this method was on the study group themselves deciding if the disease under discussion was a local problem, and if so, how it was spread in their village and what curative and preventive measures could be taken. In several parts of Tanzania, the discussion of TB brought about lengthy analysis of the transmission of disease. In analyzing the local situation, one group decided that the village practice of passing one drinking container around the circle during social drinking sessions could contribute to the spread of TB and decided to discourage the habit as much as possible. This way of spreading disease had not been discussed during the broadcasts or in the text books. The solution arrived at was an example of the potential for analysis of seemingly complex social problems that existed, perhaps uniquely with the people themselves.

In other parts of Tanzania, groups collected money in order to buy water pipes so that local water supplies could be improved. In some southern areas of the country there was emphasis on the cleaning and protection of wells. Cement

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[367] Budd L. Hall: "Mtu ni Afya: Tanzania's Mass Education Campaign". Convergence, Vol.7, No.1, 1974, p.74.

walls were built around wells to prevent ground water from running in, and the general area around the wells was cleaned. In one division in the Iringa Region, the groups realized that bus stops, where people often wait for hours in rural areas, were quite unsanitary. So they decided to build latrines at each of the bus stops in the division. Another example of spontaneous activity generated by the campaign as indicated by Hall, was the series of twelve poems that appreared in the national newspapers written by different people about the campaign, in general, and about the prevention of specific disease.[368]

5.2.10 Cost

One of the important features of any nonformal education programme is to make it as economical as possible. This is a necessary factor in view of resource constraints that many Third World countries are now facing. Mass education campaings in Tanzania have proved to be low cost ventures. The cost of the previous campaign, "Wakati wa Furaha" was 11,433.46 US dollars. It covered approximately 20,000 people, and the cost per participant was estimated to be 4 shillings (US $0.56).[369] See Table III which records the expenditure.

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[368] Ibid.
[369] B. L. Hall: op.cit. 1974, p75.

Table III

Expenditure of "Wakati wa Furaha" Mass Education Campaign in Tanzania

Campaign Items	US Dollars
1. Production of Study Materials (Textbooks, study guides and radio materials)	829.09
2. Publicity	5,614.63
3. Stage I Training (organizers)	1,207.00
4. Stage II Training (group leaders)	4,379.95
5. Evaluation	231.75
Total	11,433.46

Source: B.L. Hall: Wakati wa Furaha: a radio Study group campaign evaluation. 1972, pp.49-50.

The estimated cost of Mtu ni Afya indicates that the entire campaign was run with an additional capital of 1.48 million shillings (about 210,000 US dollars). The grant was provided by the Swedish International Development Authority (SIDA). It represents roughly 1.4 shillings (0.14 US dollars) per participant.[370] The largest expenditure was for the provision of printed materials. This campaign produced one million copies of two 48 pages illustrated books at a cost of just over 0.10 US dollar (Tanzanian 0.75 shilling) per set of two books. The total printing bill including posters and group leaders' mannuals was over 800,000 shillings (approximately US $140,000). The campaign did not provide radios or batteries to groups.[371] Table IV below gives percentage and the actual amount spent on different

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[370] Budd L. Hall: op.cit. 1974 Convergence, Vol.7, No.1, p.75.

[371] Ibid. p.76.

aspects of the campaign:

Table IV

Expenditure on "Mtu ni Afya": Mass Health Education Campaign

Campaign Items	Percentage	US Dollars
I. Training of Personals	36% of the total	75,600
2. Printing of Study Materials	50% of the total	1,05,000
3. Distribution of Materials	6% of the total	12,600
4. Radio Production & Research	8% of the total	16,800
Total		210,000

Source: B.L. Hall: Participation and Education. 1975, p.19.

The actual production of radio programme cost was less than $600 additional capital. This was because the production of radio programme made use of the already existing broadcast and radio facilities at Radio Tanzania and of services of health education and adult education broadcasters, whose work was covered in salaries paid by their respective institutions. If all costs of staff time, petrol expenses, travel expenses for individual group leaders and local distribution costs were added, it was stated that the total cost would have been about US $610,000 or $0.47 per participant[372] which would still be less than the "Wakati wa Furaha" per participant cost. "Mtu ni Afya campaign", which reached about two million people at the cost of 1.4 shillings ($0.14) per participant was in fact, radically economical.

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[372] T. Dodds and B. Hall: Voices for Development. op.cit. 1977, p.293.

5.2.11 Evaluation of the Campaign

The evaluation of Mtu ni Afya mass education campaign represented a gradual improvement over the evaluation system of previous campaigns. The class attendance register which was given to each group provided useful details. For example: names of the members, number of classes attended, places of meeting, group leaders' name and address, occupation, sex, age and schooling of participants. All these were a series of measurements and sources of information designed to aid in an assesment of some aspects of the campaign. In addition to such routine matters as total enrolment, national distribution of groups and attendance rates, the evaluation was designed to measure the changes in observable household health practice and the amount of information gained through this method of study as a result of the campaign.

Of particular importance in the campaign was the measurement of changes in health practice. A survey of eight villages (the names are not specified) was carried out before and after the campaign. Each household was surveyed on score of 0 to 12 depending upon the number of positive practices observed. It was noted that some groups took no more than one activity. Hall and Dodds indicated that before the campaign the mean health practice index for all houses in eight villages was 3.6 and after the campaign the mean

index was 5.5, a relative increase of 60%.[373] This indicates that each house in the entire sample improved its health environment by changing nearly two negative habits into the positive ones.

Table V

List of Activities Most Commonly Carried out by Study Group the Percentage of groups Practising each Activity

a. Removal of vegetation from the vicinity of the house	28%
b. Digging latrines	20%
c. Destroying stagnant water	19%
d. Boiling and /or filtering water	12%
e. Clearing areas around the house	11%
f. Draining pools	5%
g. Using materials preventive tablets and/or insectives	5%
h. Digging wells	3%
i. Building racks or stands for eating utensils	3%
j. Avoiding group use of drinking container	2.3%
k. Putting bedding in the sun	2%
l. Covering food	1.5%

Source: Dodds and Hall: Voices for Development: Tanzania Radio Study Group Campaign. 1977, pp.285-296.

Secondly, the amount of knowledge gained was determined by the difference in the scores of pre-test and post-test of participants in Ujamma and non Ujamma villages. Hall noted that there was a relative improvement of 47% from the pre-test to the post-test scores which was an increase from 43% to 63%.[374] Ujamaa villages scored higher than non-ujamaa, perhaps demonstrating increased political motivation of members in adult education activities. Table VI provides a health index of four ujamma villages.

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[373] T. Dodds and B. Hall: Voices for Development. op.cit. p.292.

[374] B. Hall: Participation and Education. op.cit. p.17.

Table VI

Health Index Table for Dodama Showing the Degree of Change in Health Practices in Four Selected Ujamaa Villages

Ujamaa Villages	Score before the Campaign	Score after the Campaign
1. Bahi	2.1	4.1
2. Mvumi	2.2	3.2
3. Homobolo	3.0	5.4
4. Buigiri	3.1	5.6

Source: Budd L. Hall: Adult Education and Development in Tanzania. Volume I, 1975, p.67.

The results of the 12-week campaign were overwhelming. The overall attendance rate was 63% as compared with 33% for normal adult education classes indicating that interest was maintained. The spectacular gain of this awareness was the construction of 750,000 new latrines (toilets) that were provided through voluntary labour.[375] Though the physical environment changes were visible, how far there was reduction in the occurance of disease was not known, because it was not evaluated. There was no provision for its measurement in the campaign. However, Hall and Dodds noted that there were reports of a large increase of people attending rural dispensaries in many areas and a medical officer indicated that cases of malarial disease were reported a month after the programme on malaria was broadcast. This showed that people were begining to respond to the campaign and taking steps to prevent themselves from diseases.

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[375] Lalage Bown and S.H. Olu Tomori: A Handbook of Adult Education for Africa. 1979, p.151.

From the environmental changes one can easily speculate that large number of people had participated in the campaign and those who might not have been in an organized group, must have been mobilized by listening to others and the radio programmes.

5.2.12 Overall Observation

The mass education campaign developed in Tanzania has proved its worth for several reasons. One of the goals of this campaign was to achieve a national pattern of operation. The results of the evaluation showed that the campaign had in fact met this goal covering two million adults. 93% of adults were farmers, out of which 68% had standard IV education or less. This suggests that the campaign was quite successful in reaching its rural target audience i.e. those who had not been reached by formal education or traditional adult education previously. Gains in knowledge, as measured by pre and post tests were statistically significant, but more important was the substantial evidence that important and wide spread changes in behaviour resulted in individual and community activities designed to improve the standards of community health.

From the economic point of view radio group study is very inexpensive in overcoming to a greater extent the need for a large number of trained instructors. In view of the effectiveness of Mtu ni Afya campaign and how economical it was in Tanzania, one can speculate about the total number of

hours which went into the activities to improve the health environment by estimating it from the construction of large number of latrines alone. There were 750,000 new latrines constructed through voluntary labour within the 12-week "Mtu ni Afya Campaign." Hall and Dodds speculated that if 50 man hours were needed to construct one latrine then to construct 750,000 it would have consumed 37.5 million man hours. And if the Government had taken up this construction work and had had to pay one shilling per hour, the cost of construction would have been 37.5 million shillings. From the point of view of cost of the campaign which was about 1.5 million shillings, radio study programme represents an economic tool for improving health practices. Construction of latrines was just one of the activities taken up by the groups. It is likely that many such activities would receive voluntary services. Comparing the costs of the two campaigns, "Wakati wa Furaha" in 1971 which reached 20,000 participants cost about 4 shilling ($0.56) per participant, while "Mtu ni Afya" which reached 2 million people cost 1.4 shilling ($0.14) per participant. This is another indication of how economical mass education campaign by means of organized radio study groups can be, if properly planned and operated.

Furthermore, it has demonstrated its flexibility having been utilized for education in basic economics for political education and for fundamental health campaigns. This method - radio study groups - has particular relevance to Tanzania

as Tanzania's development strategy emphasizes people's involvement in the discussion of development plans which will effect their lives. This concept as was previously indicated has been clearly laid down in the TANU Party guideline of 1971. The process of dialogue within the group is therefore very important as the information imparted. As Hall and Dodds put it:

> "The emphasis in this method is on complete and equal participation of all group members in exploring the relevance and importance of the information distributed by air and print to the reality of each group's existence. This exploration creates knowledge that has meaning for each and everyone of the people involved".[376]

Being a nationally directed campaign assisted by radio, written texts and study groups, the organization had been near perfect. It was a genuine effort for change by government and fortunately for Tanzania the multiplicity of languages which beset other developing countries is absent. Swahili is the common language and radio broadcasts were beamed specially to organized groups. It was very easy to use a single language to reach every corner of the country.

This campaign has been Tanzania's most successful mass adult education effort to date, with nearly 40% of all adults between 15-60 years enrolled and hundreds of thousands of homes involved in changes in health practices as a result of increased awareness. However, there were a few weaknesses noted, which if rectified could make such a

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[376] Dodds and Hall: Voices for Development: Tanzania Radio Study Group Campaign. International Extension College, 1974.

mass education campaign a much greater success. Firstly, the planning and preparation period should be long enough to make sure that everything needed is ready before the programme begins. Secondly, two to three day seminars seem rather inadequate to train supervisors and group leaders effectively. Therefore, extending the training period may improve the efficiency.

Most essential is that the printed matter proposed for actual campaign work must be ready and used during seminars. The group leaders' seminars in fact can act as an opportunity for the distribution of materials to the groups. This will ease the confusion and delay in the delivery of books to the groups later and it will also save time, labour and ensure that all groups have received the books needed. Printed material is important in radio study groups therfore, each member should have a copy which can be treasured by adults. This could be possible if a survey provides correct information about the number of members in each group. From Mtu ni Afya's enrolment figures, one can expect that in future a larger clientele than those registered would like to participate in the programme. Therefore, there should be enough (in fact extra) material so as to overcome any shortage of books.

The ideal size of a group should not be more than 15 because within a short period of one or one and a half hour programme every member in the group may not get a chance to participate and express his/her views. Grenholm noted the

demand for identification, i.e. the listeners and the readers should be able to identify themselves with the speakers on the radio. People from the very same strata of society as the study participants should speak and act. It would be much easier and more natural for a villager from a region of the country to listen to and identify his own problems with those of a villager in another part, than to the same views expressed by an expert from the University. Either ordinary villagers should be guided and made to speak on the radio or the well educated individual should avoid using sophisticated vocabulary. Although the national language might be understood by all, one cannot assume that all can follow the highly educated person who speaks with fluency. Therefore, the speaker should bear in mind the capacity of an ordinary illiterate villager to understand what he or she is saying and be slow and clear in delivering the talk.

As far as the inadequate training of group leaders, distribution of material or large group size prevents the effective development of dialogue within groups, this method in any other country would not have been so successful even if large number of participants were educated at a low cost. But this did not happen, because of the socio-political framework in Tanzania.

Education is consciously viewed by both, the government and the people as an important part in an integrated strategy for egalitarian development based on rural

transformation. 1970-1971 was designated as the adult educucation year in Tanzania, which demonstrated that there was an increasing commitment on the part of the government to divert sufficient resources to adult education programmes of a variety of kinds. Nyerere feels that if adult education is given priority then those who are denied formal schooling may be covered by adult education programmes. Once adult education is available to all then priority can be moved to universal elementary education.

The Government development strategy is embodied in an organizational framework of Government and of Party. Like the nervous system of human body, it spreads out its network throughout the country, from the capital metropole down to the peripheries, including the smallest rural areas. Such a wide spread organizational network of the Government and the Party enables supervision and support for each individual group as well as a basis for popular participation in the decision-making process. Like the problems faced in the "Wakati wa Furaha" campaign were overcome in the health campaign, similarly, the short-term organizational difficulties that were faced in the "Mtu ni Aya": health education campaign could be prevented in future and many such education campaigns would continue to be important features in Tanzania's overall mass educational provision.

5.3 Employment-Oriented Nonformal Education: Brigade Training in The Republic of Botswana

5.3.1 Background On The Republic of Botswana

Botswana, since 1885 known as the "British Protectorate of Bechuanaland" achieved independence on 30th September 1966 when it became known as the "Republic of Botswana." It is a land-locked country in Central Southern Africa surrounded by South Africa, Namibia (S.W. Africa) and Zimbabwe (then Southern Rhodesia) and touches the Zambezi and Chobe rivers in the North. With a total area of 231,805 square miles, of which 11,805 sq. miles. comprises inland water or swamps, Botswana is about the same size as Kenya (220,000 sq.m.) or France (212,600 sq.m.)[377] and is divided into ten administrative districts.[378]

The population of Botswana as of 1975 was 719,000[379] growing at a rate of 2 to 3 percent annually. About 94% of the population are native Africans or blacks called the "Batswana" consisting mainly of the eight principal tribes. Unlike other African nations they lived in harmony under the leadership of Sir Seretse Khama.[380] "Setswana" is the main African language while the official language is "English".

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[377] P. Smith: Botswana: Resources and Development. Pretoria, 1970, p.11.

[378] I.M.F.: The Surveys of African Economy Volume 3. 1973, p.29.

[379] Clarke Newton: Southern Africa: The Critical Land. 1978, p.191.

[380] Sir Seretse Khama, who was the president of Botswana since its independence, died in June 1980.

The population is mainly concentrated in the eastern part of the country, where about 80% live within a fifty miles belt along the railroad line. The urban population as percentage of the total population, has increased from 2.5% in 1964 to 15% in 1976[381] and they live in five 'urban' centres of Gaborone (capital), Francistown, Labatse, Selebi-Pikwe and Orapa. The remaining population lives primarily in native villages with about 5% of the population employed in South Africa.[382] Until 1966 the population had been entirely dependent upon cattle rearing with each family owning a few head of cattle, the subsistence production of crops and upon the remittances from the migrant labourers in South Africa. Since independence, agricultural recovery (as a result of sustained run of good weather after the severe drought of mid 1960s) and mineral exploitation combined to produce an exceptionally high and sustained growth of output over the following decade. However, the benefits from the growth were not distributed evenly.

The discovery of new deposits of mineral wealth and the growing export market for beef - the most traditional product of the economy - brought unexpected prosperity to the new republic in its first decade of independence. GNP, which had been virtually stagnant during the post war years, leaped forward from 7% per year in 1966 to about 20% between 1968 and 1975. Exports and imports mushroomed and the

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[381] Penelope Hartland-Thurnberg: Botswana An African Growth Economy. Colarodo: Westview Press, 1978, p.16.
[382] Ibid. p.14.

foundations of a modern thriving economy were put into place. Three major mining construction operations - diamond mining at Orapa, copper-nickle production and refining at Selebi-Pikwe and some coal mining at Morupule - were initiated and completed between 1966 and 1976. The share of mining and infrastructure construction in GDP in 1976 increased by 12%.[383] Manufacturing and Service sector accounted for 5% of GDP. According to the United Nations statistics, there were 55 manufacturing firms in 1973, but mostly owned by foreigners. Only 7% of these firms were owned by Batswana.[384]

Agricultural industry is comprised mainly of crop cultivation and cattle ranching. Although the importance of agriculture has diminished since the discovery of minerals, yet it still remains the largest single industry in Botswana accounting for about one-third of GDP. On account of the arid climate, agricultural output is highly dependent on weather conditions. Crops (millet, maize, bean soghum) comprise 20 to 25 percent of the agricultural output.[385] Land cultivation is not held in the same high esteem as ranching, but crop production is vital for many of the poorer people. It is the single most common production activity and the farmers need to grow crops for self-subsistence.

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[383] Ibid. p.13.
[384] Ibid. p.53.
[385] Ibid. p.39.

Cattle ranching is the dominant agricultural activity accounting for about 80% of the marketed agricultural output and for 55% of the total agricultural production.[386] Cattle, numbering three million in 1976 now outnumber people by four to one and provide a fundamental part of the livelihood for a majority of Botswana families. They are the source of wealth and power, a source of food and status symbol. However; since the drought of mid 60's, the households without cattle in rural areas have increased from 35% to 45%. It is estimated that now in the rural sector, 45% of the household own no cattle, 40% own up to 50 head of cattle each, which is considered a minimum to provide a livelihood from cattle alone. This accounts for one-quarter of the total national herd and the remaining 15% of the population, who are the large cattle owners own three-quarters of the national herd.[387] The unequal distribution of cattle ownership in rural areas has created unequal distribution of incomes too. It is estimated that the poorest 40% of the households receive 12% of the total rural incomes, whilst the richest 20% controls 58% of the income.[388]

Per capita incomes increased from P60 (at independence equivalent to US $80) to P450 by 1976/77.[389] Using this

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[386] Ibid.

[387] C. Colclough and S. McCarthy: The Political Economy of Botswana. New York: Oxford University Press, 1980, p.112.

[388] Ibid. p.191.

[389] P = Pula, the currency of Botswana was introduced in 1976. Prior to this South African currency 'Rand = R' was used. Towards the end of 1977 one pula was equal to US $1.20. Currency hereafter will be mentioned as 'Rands' to indicate its use prior to 1976 and 'pula' since 1976.

measure alone, Botswana which had been among the 20 least developed countries in the world in 1966, ten years later climbed up the ladder, leaving more than 50 countries in the world poorer than her. Her per capita product was higher than the average for Africa and Asia, excluding Japan.[390] However, like many Third World countries, the benefits from the rapid economic growth did not spread evenly between the rural and urban sectors. More than three-quarters of the capital expenditure were invested in urban construction leaving less than a quarter of the expenditures for rural development[391] where 80% of the population lives.

Towards the end of 1970s, investment in rural development increased to one-third of the total capital expenditure. However, it was still much less than that spent in modern sector with its much smaller population. On the whole, economic growth has so far been heavily concentrated in the livestock and mining sectors. People who neither own cattle nor have wage employment have largely been excluded from the effect of economic growth. This imbalanced pattern of growth has led to increasing inequalities between individuals and communities. Urban development increased rural-urban migration, and along with it unemployment also increased in spite of the fact that employment increased by 10% annually. This is because of the absorptive capicity of the modern sector did not grow as fast as the rate of

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[390] C. Colclough and McCarthy: op.cit. p.74.
[391] Ibid. Table 4.4, p.93.

migration.

While the first important feature of Botswana is the rapid economic growth, the second noteworthy feature is the unprecedented expansion of the formal school system. Primary enrolment doubled from 66,061 in 1965 to 116,293 in 1975 with only 63% of the school age population enrolled in schools. During the same period secondary level enrolment in both secondary academic and post-primary institutions increased six times from 1,683 to 12,147 catering for 18% of the age group, and enrolments in the tertiary level i.e. higher education and post-secondary training increased five times i.e. from 83 to 543 catering for only 1% of the age group.[392] Along with this educational expansion, expenditures in education increased from 10% to 20% of the annual government budget, but a disproportionate share was absorbed at the secondary and higher levels, leaving a relatively small proportion for large and increasing numbers receiving primary education. Lack of sufficient resouces resulted in low quality education in primary schools with an increasing number of dropouts and repeaters.

Education is essentialy academic, oriented towards examination[393] which acts as a sieve to strain the "best" into the bottleneck of the secondary and tertiary levels.

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[392] C. Colclough and S. McCarthy: op.cit. 1980. Table 8.3, p.213.

[393] Seven year primary schooling leads to the 'Primary School Leaving Certificate'. Three years of post-primary schooling leads to the 'Junior Certificate or Form III. While a further two years lead to the 'Cambridge School Certificate' or Form V.

The primary school curriculum in Botswana is designed as the initial stem of a longer programme and there is rarely any attempt to cater especially for the larger numbers of school leavers and dropouts for whom education at this level is terminal.[394] Less than 20% of primary school children gain access to secondary schools,[395] which is stratified into academic secondary schooling and post-primary training. As for enrolments in 1975, 9,917 students out of a total of 12,147 (i.e. about 12% from 20%) were in academic secondary schools.[396] The greater number in these secondary schools indicates the level of demand for such education since it is a stepping stone to higher education and to better employment opportunities. Since only one fifth of primary school completers can find place in any kind of secondary educational institution (most of these are from urban schools), the remaining 80% including the early dropouts and repeaters enter directly into the labour force. To this can be added those who have no access to education. Large numbers migrate to urban centres to seek wage employment in the modern sector which offers little opportunity for unskilled labour.

In an attempt to provide primary school leavers and dropouts from the formal system with some form of training and education that will equip them with skills for

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[394] Peter van Rensburg: Education and Development in an Emerging Country. Upsala: The Scandinavian Institute of African Studies, 1967. p15.
[395] C. Colclough & McCarthy: op.cit. 1980, p.215.
[396] Ibid. see Table 8.3, p.213.

employment or self-employment preferentially in the rural sector, that the 'Brigade Training' nonformal education programme was begun in Botswana 19 years ago. The Brigade Movement was however an outcome of the experiment that was carried out at Swaneng Hill School with the hope of providing a model of educational reform for the secondary school system in the country as a whole.

5.3.2 Experiment at the Swaneng Hill School

Brigades[397] training is a solution to the school leavers problem in Botswana. The origin of 'Brigade Movement' lies in the experiment carried out in the town, Serowe, which had no secondary school. As a matter of fact, when Patrick Van Rensberg, the proponent of the movement began the experiment, there were only six secondary schools in Botswana (1962) with a total enrolment of about 1500, although primary school pupils numbered 60,000. With the help of 500 pounds from the Ethical Union in Britain and volunteers from South African Camp, Swaneng Hill, the first secondary school (one classroom) was built and opened in Serowe in February 1963 by Van Rensberg and his wife Liz. From the outset, Swaneng Hill School was oriented towards the poor rural community. This school was guided by the

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[397] For a general fascinating account of the initial Brigade training programme began as an experiment in secondary education see: P. Van Rensberg: Education and Development in an Emerging Country. For a detailed account see P.V. Rensberg: Report From Swaneng Hill. A short descriptive overview is in J. Sheffield and V. Diejomoah: Nonformal Education in African Development. 1972.

following principles:

1. Seclection would be based on a first come first served basis rather than on academic examination.
2. Students would contribute voluntary labour rather than pay fees.
3. Staff - at least during the initial years - would primarily be recruited from overseas organizations.
4. Training would emphasize skills related to rural Botswana.
5. Academic subjects would not be neglected, but the school would include a greater emphasis on the development of Botswana. "Development Studies" was the name given to a required course that focussed on actual development problems of Botswana - economic, social, cultural etc.
6. Recruitment costs would be covered by self-help and by income derived from work done for outside agencies.[398]

Based on the above principles, the first 28 pupils who had all completed primary schooling were admitted without any form of selection. Due to insufficient resources, the school could not provide facilities for sports, so students themselves decided to provide a sports field through their volunteer work in free time, chopping down thorn trees and digging out the stumps. From that moment onwards, voluntary work became a regular feature of student activities. Gradually students' volunteer work in building classrooms was restructured to labouring jobs like digging foundation trenches and mixing concrete and mortor. When students' enthusiasm grew and they became eager to learn to build their own school, Martin Kibblewhite, a competent and

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[398] J.R. Sheffield and V.P. Diejomoah: Nonformal Education in African Development. New York: African-American Institute, 1972, pp.65-66.

experienced skilled volunteer expatriate offered his services to teach the theory and practice of building construction. Since then, students working with teachers, have constructed three science laboratories and a big school hall and also participated in the construction of other buildings. Thus voluntary work came to represent a real saving in costs which helped the school to grow faster than anticipated. Money saved was utilized on new classrooms, on equipment and for getting more volunteers.[399]

By late 1964 Swaneng Consumer Co-operative was formed as a registered society. Some of the staff were involved in running the society and in training of manager. A few students were elected to the management committee. Though the school's involvement in the Society was marginal, the idea was developed of making the secondary school a focul point for development in the community.[400] During the first two years of the experiment at Swaneng Hill, the school had become distinguishable from other secondary schools. Its diversified curriculum included subjects such as metal work, woodwork, building science, technical drawing, commercial subjects, arts and crafts, and agriculrural science in addition to Mathematics and Science. Students were given a greater say in the running of their own affairs so as to encourage initiativeness, reliability, self-reliance and a greater sense of responsibility. On the whole, Swaneng Hill

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[399] P. van Rensberg: Report From Swaneng Hill. Upsala: The Dag Hammarskjold Foundation, 1974, pp.16-17.
[400] Ibid. p.17.

School became self-supporting using pupils' voluntary labour. It also improved their motivation.[401] Encouraged with the initial success at Swaneng Hill, Van Rensberg began an alternative programme known as the "Brigades", with slightly different objectives.

5.3.3 The Begining of The Brigade Training

At the begining of 1965 in response to the many imploring young people encamped outside Van Rensberg's house seeking entry into his school, he took some initiatives - in association with the Chief of the tribe - in attempting to deal with the problem. There were no funds and resources to educate or employ the large numbers of young people turned away from secondary schools. This problem was taken to the chief of the tribe, who provided Rensberg with land. On this acquired land, the school leavers were offered on-the-job apprenticeship training. The trainees here were to work productively while they learned to build. They were to undertake building work for public and semi-public authorities at relatively low cost. Their earnings while they learned on the job, was to cover costs. This type of

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[401] This experiment, that was intended to introduce productive work in education and provide a step towards reform in secondary schooling, however did not succeed in the long run, because it took place in isolation without political backing. There grew resistence towards students' labour both from parents and students and so Van Rensberg resigned in 1971 and concentrated on maintaining the Brigades at Serowe which had been established by him in 1965. Swaneng Hill Secondary School is now like any other secondary school with its original objectives lost.

on-the-job training was called "Builders' Brigade" - a name taken from Ghana's builders Brigade founded by Kwama Nkrumah in the late 1950.[402] However, the important principle of covering costs differed from the first Brigade formed in Ghana. This name was chosen to emphasize that it was not a school or training centre offering the traditional theoretical and classroom content.

About 40 men joined the first 'Builders Brigade' at Serowe and they set out to work, building for themselves a centre which was situated away from the Swaneng Hill School so as to emphasize the difference between the 'Brigade' and the 'School'. The school was a reformed secondary institution and the Brigade provided nonformal education supplementing primary education. From these early experiences, a model of cost covering vocational training programme emerged, which has since been replicated in Serowe and elsewhere.

5.3.4 Aims and Objectives of The Brigades

The main thrust of the Brigades Training in Botswana was to provide a second chance for those with no other alternative i.e. to provide cheaper means of giving primary school leavers, who would otherwise be unemployed or employed in subsistence agricultural pursuits, an opportunity to find employment or to be more productive in self-employment. An important objective at the same time was

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[402] J. Sheffield and P. Diejomoah: op.cit. 1972, p.65.

to cover the recurring cost by self-help and income derived from the work done for outside agencies. Being employment-oriented, the Brigades as nonformal education for school leavers, also aimed at their all round social and economic development. Their objectives were therefore:

1. To provide on-the-job training and education for school leavers while drawing minimally on the scarce resources available.
2. To increase resources and add to the stock of the community's wealth.
3. To produce goods and services not otherwise available in the community and achieve a measure of import substitution.
4. To create employment.
5. To innovate techniques and methods of production.
6. To seek to provide a humane, people-centered orientation, to develop and to provide a sense of, and pride in craftsmenship and job satisfaction.
7. To provide an orientation to work, production and development that is often missing from more conventional form of training.[403]

5.3.5 Expansion of The Brigades

Since the inception of the first Brigade at Serowe in 1965, the number has increased dramatically. By 1971 there developed 12 Bridage Centres with a total of 31 Brigades.[404] However, there are 13 Brigade Centres now, but the total number of Brigades existing is not available. The number of

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[403] P.Van Rensberg: "The Serowe Brigades: Seeds of an Alternative Education". in Richard O. Niehoff (ed) Nonformal Education and The Rural Poor. 1977, pp.138-139.
[404] Shieffield and Diejomoah: op.cit. 1972, p.66.

Brigades for each centre varies with the smallest having two Brigades and the largest at Serowe, having 25. Between 1965 and 1975 enrolments increased from 490 to 930 trainees. Over 500 of its ex-trainees and other workers were employed directly by the Brigades in the rural areas.[405]

Brigades now operate at four levels: the first level offers a preparatory course for youths aged 12 to 16, who now constitute the majority. The second level consists of trainees aged 12 and upwards, who devote four days a week to training and taking related educational instruction on the fifth day. The third level consists of the Advanced Brigades, which offer two-year on-and off-the-job upgrading courses. At the fourth level, there are 'short' courses for adults with family responsibilities unable to attend regular lengthy course.[406]

Some of the Brigades like those in engineering, textile, pottery, and farming activities have transformed into production units, rather than just being training units. They cross-subsidize the capital and recurrent costs of other Brigades providing a considerable help to the new ventures during their early years of operation.

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[405] C. Colclough and S. McCarthy: op.cit. 1980, p.218.

[406] I.L.O.: Education and Development. Report III, 5th African Regional Conference Abidjan, Sept-Oct 1977. Geneva, 1977, p.25.

5.3.6 Types of Brigades

The Brigade programme embraces about twenty different skills. For example: building, carpentry, welding, bricklaying, electrical trade, dress-making, farming, handicrafts, mechanics, textile, tanning etc. Each of these trades is provided by different Brigades.

5.3.6.1 Builders' Brigade

Builders' Brigade provides training for building construction by training brick layers, stone masons and carpenters (large Brigades have differentiated into Builder and Carpenter Brigades). Trainees spend four days a week working either on the site or in the Brigade premises. Their work involve everything from digging foundation trenches, mixing and pouring concrete, mixing mortar, laying bricks, plastering, glazing, painting, fitting doors, making rafters for roofs, putting them up on the walls, fixing corrugated-iron sheets to the roofs, etc. The stone masons are taught to cut sandstone for use in building, make jig-saw patterned stone walls for rooms of fancy buildings like hotels, while carpenters make benches, chairs, cupboards, desks, other furnitures and wooden equipments required. They carry out woodwork that is required in building programme or tender for furniture contracts. In effect, these trainees do all the work that is required for building and construction.

Contracts from public or semi-public authorities are taken up by the manager of the Brigade, who with the help of trainees in Advanced Building Course and a volunteer or part-time architect, lay out the plans and check the construction site before starting construction work which is done under the supervision of the instructor/supervisor of the Brigade. Most of the work done by builders is the building of new primary schools, other Brigade dormitories, co-operative buildings, private homes and hotels. In essence, the "Builder Trainees" do most of the jobs of the village including the contracts of nearby villages. Thus, while learning they earn to recover the cost.

Between 1966 and 1969, Serowe Builders' Brigade completed projects worth $112,000. One third of this work was done for Swaneng Hill School. Between 1965 and 1973, this Brigade trained about 150 builders and more than 75 passed the Government Trade Test. This was achieved with no cost to the State. At the end of the training period, trainees take Government Class II Trade Test Certificate which is a sort of yard stick for judging the quality of the training received in Builders' Brigade. Most of the graduates from Builders' Brigade were able to secure paid employment in Orapa Diamond mine during the period of mine construction.

5.3.6.2 Textile Brigade

The first Textile Brigade was established in 1967 at Serowe to provide a two year training for girls in spinning, weaving and dress-making. Two years later a similar progamme was introduced in Shashi River and both the establishments added printing and dyeing to their program.[407]

In the weaving section or workshop, girls wash mohair from the Angora goats; card and spin the wool on spinning wheels and spindles or dye; weave carpets, rugs, tapestries or blankets with colours and designs chosen by instructors. In the pattern section, girls cut out the cloth into patterns for school uniforms, dresses, shirts or other garments on job order basis as well as for sale in the open market. The cut patterns are sewed into dresses in the 'sewing section'. In the screen-printing section the work involves cleaning the silk screen, preparing new ones, mixing inks of different colours for dyes, then finally printing the cloth and dying it. The bales of printing cloth is then ready for despatch to Botswana craft in Gaborone or the co-operative store for sale. All the work in the Textile Brigade is done under the supervision of instructors.

Certificates are not issued so there is an eagerness for certificate which only indicates a desire for paid jobs. Those completing the training, are encouraged to set up business on co-operative lines. A few of the first weavers,

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[407] Anthony Martin: "Extract From a Report on the Brigades in Botswana". p.215. in P. Van Rensberg: Report From Swaneng Hill. Appendix 4, 1974.

who graduated from the Serowe Textile Workshop had set up their own business in a group and called it "Unity Workshop".[408] However, when difficulties began to arise in view of competition with the imported goods, they were integrated in a co-operative activity called "Boiteko".[409]

5.3.6.3 Farmers' Brigade

As already indicated, Botswana depends upon agriculture for support of more than 80% of its population. Since the majority of the Batswana will have to make a living on the land, it is necessary to equip the young people with adequate training in agriculture to enable them to live productive lives. Therefore, a Farmers' Brigade was established in 1967 at Serowe initially to train 80 school leavers per year (subsequently reduced to 40) for career in farming based on livestock raising. Students here are given training in diversified farming operations including the production of beef, mohair and wool (for textile Brigade), pigs and goats, diary products, vegetables and other crops of high value (using intensive horticulture and hydroponics with controlled borehole irrigation and flood spreading techniques), eggs and poultry, sunflower and silage and where cheap extensive irrigation is possible, a variety of arable crops.[410] To be profitble, these operations require fairly large cattle-ranching and hence need substantial

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[408] Ibid.

[409] Aims of Boiteko will be discussed later.

[410] P.V. Rensberg: "A New Approach To Rural Development". Botswana Notes and Records, Volume 3, 1971, p.209.

start-up capital.

The products from farming are sold in and outside the community and so is the milk, which is pasteurized and packed and delivered to nearby towns. The Botswana Meat Commission which owns the national abattoir, operates a grazier scheme in which the Serowe Farmers' Brigade participates. The Commission finances the purchase of immature stock which are then fattened on approved ranches. When the animals are slaughtered, the Commission deducts from its payment, the capital advanced, interest, and various charges for administration. By breeding and fattening the beasts for a period of one year, the Serowe Brigade had been earning about $15 per beast in 1973.[411] The income earned was utilized for Brigade expenses and to recover the initial capital. Farmers' Brigades are not awarded certificates because there are few or no paid jobs in Botswana to which possession of such certificates would provide entry. Certificate would only encourage unreal expectations, and because certificates are not awarded, very few are attracted to this training which also requires hard labour.

Farmers' Brigades are faced with two dilemmas: whether to aim at preparing boys to return to their family farm or at eventual post-training settlement - co-operative type of settlement. Considering the economic inequality of rural Botswana where 45% of the household own no cattle, if

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[411] P.V. Rensberg: op.cit. 1974, p.87.

training is provided to prepare school leavers to return to their family farm and utilize their skills, then such a Farmers' Brigade will reach only the wealthiest section of the community who can return to their farms. But it is the poor section of the community that is most likely to be interested in joining the Farmers' Brigades.

Trained graduates will need capital assistance for self-employment otherwise they will fall back on self-subsistence farming with little chance of rising above the poverty line. As it is difficult for individuals to set up their own business without large capital or to acquire paid employment, Farmers' Brigades encourage the trainees to form co-operative settlements. To do this, the Brigade sets aside land (either bought privately or acquired from the government) for trainees when they are recruited. Training is now divided between the central Brigade farm where trainees learn the skills, and the trainees' settlement farm where they use the acquired skills. After the training career, the Brigade graduates settle down in the 'settlement farm' for co-operative farming. Rensberg noted that a little modification has been made in the system by having a settlement farm in the village involving the families as well. The trainees are divided into two groups. While one group undergoes training, the other works on the settlement farm. Then, after three months the group is sent to the settlement farm to implement the acquired skills, while the other group comes to the Brigade centre. Each group in

rotation takes up training and working. This approach provides a close link with the local communities to enable them to make greater contribution in terms of land, cattle and in some cases capital.

5.3.6.4 Other Brigades

Various other Brigades in Botswana include mechanical, electrical, handicrafts, leather tanning, hotel keeping etc. Electrical and mechanical Brigades train motor mechanics over a five year period, and machinists: turners, millers, tool makers, motor engineers, over a period of four or five years.[412] Trainees learn to operate lathe or grinding machines, to do welding, simple to less complex repairing, maintenence techniques of vehicles, bore hole equipments, engines and mechines of all kinds, and manufacturing of appropriate tools and equipments, sometimes especially designed for rural development work. They are also trained to do wiring for lighting purposes, install generators or fix switch boxes.

In Tanning Brigades, trainees are taught the complete process of tanning animal skin and the use of leather for manufacturing shoes and other leather articles for sale. Because livestock raising is and will remain the chief occupation of majority, the potential of leather tanning is great. Some of these Brigades have been converted into production units. While vocational training forms the major

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[412] Anthony Martin: op.cit. p.216.

part of the Brigade training programme, one fifth of the training period is devoted to non-technical teaching to relate the practical skills learnt with the theory involved with it.

5.3.7 Non-Technical Curriculum

Brigades training with its heavy emphasis on productive work to cover costs, is primarily a vocational training. However, they provide non-vocational teaching in addition to the theory associated with the practical skill activity. Eighty percent of the trainees' time is spent in working in the trade learning and at the same time producing goods and services for sale and the remaining 20% is devoted to non-vocational academic studies. This is limited to one day per week because the Brigades have to cover the cost which increases if less time is spent for production. The objectives of Brigades non-technical teaching are:

1. to improve the skill and efficiency of trainees as producers;
2. to make them aware of the economy and their role in it, and to prepare them to undertake production on their own, preferably in co-operatives; and
3. to inculcate some of the worthwhile qualities - initiative, reliability, self-discipline, loyalty to agreed communal objectives, integrity, moral courage, compassion and rational and scientific thinking - to make trainees better producers and better members of settlements and co-operatives and society as a whole.[413]

Non-vocational education is composed of subjects like

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[413] P.V. Rensburg: op.cit. 1974, p.112.

Mathematics, Science, Development Studies and English and Cultural Studies (optional). As far as possible, teaching is given on practical basis, linked closely to the production experience and the lives of trainees integrated in inter-disciplinary teaching to promote learning effectiveness.[414]

Elements of Science and Mathematics are applied and used within the production process of every Brigade which provides a starting point for teaching and arousing interest in these subjects. Development Studies are concerned with the process, implications, choices and history of development and thus provide opportunities for practical application too. The origins, development, the use of raw materials and tools the trainees utilize, and the source of capital that bought them, provide a practical application of the knowledge.[415] If trainees are to be motivated to engage in self-employment and learn to manage their own affairs, they should be made aware of why there is little paid employment, why there is a shortage of secondary school places, why Brigade training is a feasible and large-scale alternative, and why it is necessary to cover costs. It is through the "Development Studies" that trainees are made aware of the working of Brigades, their aims and objectives. This subject also provides the knowledge of development and production, the role of money, how developed countries have

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[414] in R.O. Niehoff: op.cit. 1977, p.137.

[415] Ibid.

reached their present position and how there have been concentration of wealth in individual hands.[416] Both Development and Cultural Studies are concerned with the social and physical environments and the changes they are undergoing, thus providing a real and meaningful starting point for tackling the subjects.

When trained graduates establish their own small business ventures or collectively set up a co-operative or settlement or appointed as manager of Brigade, they ought to have some administrative knowledge too. The administration of Brigades or co-operatives require the ability to read catalogues, to complete forms, to order materials, to write up minutes, to know the proceedure of meetings, to correspond transaction etc. It also requires the knowledge of costing, estimating and budgeting, profits, banking etc.[417] English, as a subject discipline, takes care of all this. Academic teaching is in English as in other secondary schools. This is mainly because of lack of Batswana instructors. Most instructors or managers are expatriates. Van Rensberg made the point that trainees generally did not want to be taught in "Setswana". However, he noted that trainees could be persuaded and teaching might also be done in Setswana if there were enough native and local teachers available. Thus efforts are made through non-vocational teaching to motivate trainees to contribute to rural

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[416] P.V. Rensberg: op.cit. 1974, p.114.
[417] Ibid. p.113.

development.

5.3.8 Costs

There is always a conscious attempt to minimize the degree of capitalization, because in rural areas capital becomes a constraint if Brigades are to be widely replicable. Some Brigades are low capital ventures while others are high. Table VII provides an idea of initial capital invested to start different Brigades at Serowe in Botswana.

Table VII

Initial Capital For Brigades at Serowe in Botswana.

Types of Brigades	Initial Capital (in Rand)	No: of Trainees
1. Builders' Brigade	4,000	45
2. Textile Brigade	48,000	60
3. Mechanical Brigade	25,000	20
4. Carpenters' Brigad	3,000	45
5. Electrical Brigade	1,000	12
6. Tanners' Brigade	6,000	18
7. Farmers' Brigade	115,000	30

Source: P.Van Rensberg: Report From Swaneng Hill. p.33.

The initial capital required for starting Builders' and Carpenters' Brigade is little, for they require not more than hand tools, wheel barrows, scaffolding wheel, while Farmers' Brigade needs large capital. As initial capital needed vary so also does the actual cost for running a Brigade. Martin's Report provides information on the recurrent expenses of the Builders' Brigade at Serowe in 1969 which shows that the budget involved was extremely low

(see Table VIII). These expenses averaged out at 95 cents per trainee per day. The expenditure noted in Table VIII does not include the salaries of expatriate volunteer organizer, part-time expatriate volunteer architect and a small amount for secretarial services that were provided by Swaneng Hill School. Salaries of managers and instructors are the most expensive items of the recurrent expenditure of Brigade, but compared with those of formal institutions it is relatively small.

Table VIII

Serowe Building Brigade: Recurrent Expenses: 1969.

A. Trainee Expenses	
Food Expenses	3,039
Salaries of Instructors	7,232
Transport of Students	1,221
Building and Equipment	128
Tools for Trainees	401
Textbooks	80
Academic Teaching	501
Total (rands)	12,602
B. Business Expenses	
Administration	316
Workshop Charges	253
Transport of Material	800
Suppliers' Expenses	99
Tools for Brigades	289
Total (rands)	1,758
Grand Total	14,359

Source: Anthony Martin: "Extract From a Report on the Brigades in Botswana". in Peter van Rensberg: op.cit. 1974, Appendix, p. 209.

In 1971 most builders paid R60 to R65 a month to instructors. There could have been an increase since then,

but not much comparatively. The low running cost is one of the chief attraction of the Brigade programme. This is evident from per pupil cost. The cost of running two schools - Swaneng Hill and Shashi River - with a total of 860 students in 1970 was R151,000 i.e. R177 per pupil per year. This was resulted from efforts at keeping the cost as low as possible. While on the other hand, the total cost for training 310 students in the two Brigades associated with these schools was roughly R20,000 i.e. it was less than R60 per trainee per year.[418] This was only a one-quarter of the cost of producing formal training for similar trades in government training establishments. Total cost of running most Brigades in the mid 1970s was P250 per trainee per year.[419]

Much of the initial work of Brigades was sponsored by agencies abroad: SIDA, Danida, Norad, War on Want, Oxfam, the Bernard van Leer Foundation and the Bread for the World. With sufficient flexibility in their regulations and bureaucracy, the initial capital provided for untried programmes was indeed a great help in establishing new Brigades. The Botswana Christian Council too played an important role in chanelling support from a number of external agencies. Some of the Brigades are subsidized by the Community Development Department, Local Councils and

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[418] P.V. Rensberg: "A New Approach to Rural Development". Botswana Notes and Records, Volume 3, 1971, p.218.
[419] C. Colclough and S. McCarthy: The Political Economy of Botswana. 1980, p.218.

Associations, including the Government, which constitute towards meeting the salary expenditure. As the most unique characteristic of Brigade is to cover the recurrent costs, five of Serowe Brigades - the builders, stone masons, carpenters, Serowe electrical, Serowe engineering and Serowe textile Brigades - had covered their recurrent cost by 1971. This has been possible because Brigades are at one and the same time both production enterprise and centres of skill training and of education.

5.3.9 Brigade Movement and the Government

It is necessary to integrate various projects of Brigade in the overall national strategy, so that duplication can be minimized and at the same time sufficient resources can be generated to support the expansion of these nonformal programmes appropriate to the changing local needs. In order to facilitate expansion of Brigades and provide resources, the Government of Botswana has set up the National Brigade Co-ordinating Committee (NBCC). This NBCC advices the Ministry of Education, which assumes an overall responsibility of Brigade Movement, on Brigade policy and Brigade problems. The Committee consists of representatives from 13 Brigade Centres and officials from a number of ministries (including Community Development, Development Planning, Personnel, etc.) who meet every month to discuss matters. The committee also has a full-time accountant responsible for co-ordinating the Brigade finances. The

Committees' objectives are therefore:

1. To co-ordinate the activities of all youth training Brigades; exchange information and ideas among the centres, and co-ordinate policies of Brigades.
2. To advise on the establishment of new Brigades with regards to type and location so that duplication is avoided.
3. To organize the provision of common services for Brigades: like assistance with planning and staff recruitment, auditing, finding market and contracts (especially central government and local government)
4. To make recommendations on curricula, training, entrance requirments, fees, staff condition, trade testing and standards.[420]

Whether the co-ordinating mechanism has been successful or not, is hard to say. Based on the fact that the secretary of NBCC does not sit on the Swaneng Hill Board of Governors or the Planning Committee of the Community Development Department, the two main Brigade sponsors, Martin indicated that the NBCC may have served to suppress proposed developments, rather than to encourage innovation.[421] Since the Brigades' significant feature is the recovery of recurrent costs, NBCC has laid down guide lines for 'cost covering' which is defined as the covering by production income of a certain number of progressive steps.

1. Production or direct cost.
2. Overhead or administrative and marketing costs.
3. Essential training costs.
4. Depreciation or capital replacement.
5. Non-vocational teaching.

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[420] Sheffield and Diejomoah: Nonformal Education in African Development. 1972, p.71. and P.V. Rensberg: op.cit. 1974 p.107.

[421] Sheffield and Diejomaoh. op.cit. 1972, p.71.

6. Room and board of trainees.
7. Additional investment capital.
8. Non-essential liason, research etc.

The first four types of expenditure is paid easily if Brigades production income is sufficient and the remaining four types of expenditures are paid from the profits or other incomes like grants. Each Brigade is expected to be covering its regular cost within five years of establishment. After five years, each Brigade is required to submit a report to NBCC showing how many of the eight expenditure steps are covered by production income and from what sources other costs are being paid. Based on the report, the NBCC evaluates the states of Brigades.[422] The NBCC has commissioned two consultants and evaluation experts in 1970 and 1971. In 1970 Anthony Martin was invited to report on the programme of the Brigades in Botswana and to suggest possible guidelines for their future development. The Martin Report recommended that the Ministry of Education should play a more active part in enhancing the prestige of Brigades, particularly in the eyes of the primary school students. A year later in 1971, the Ministry of Education invited Virginia Makins to examine and report on the context of academic teaching provided in Brigades and to recommend how it could be improved in the light of overall aims of the Brigade Movement. The Makins report suggests that institutions such as Vocational Training Centre, the Botswana Agriculture College, and the Botswana Training

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[422] Ibid. p.77.

Centre including the University Adult and Extension Department, Rural Training Centres and Teacher Training Colleges must develop links with Brigades and arrange to take people with a satisfactory Brigade record for appropriate courses, disregarding their lack of certification.

Brigades now have considerable support from the Government and more especially the politicians. All four political parties have accepted the Brigades and so have the Trade Unions. In July 1977 new offices and teaching facilities were inaugurated in Gaborone and simultaneously various instructor trainees and extension officers were offered training of Brigade staff.[423] According to Van Rensberg, the Government was to establish (probably in operation now) a Brigade Development Centre to train management, teaching and instructional personnel using its own facilities.[424] The objective is to ensure that the Brigade Movement is run efficiently by Batswana managers who would be more closely familiar with the needs of the country.

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[423] Gwendolen M. Carter and E.P. Morgan (ed): From the Frontline: Speeches of Sir Seretse Khama. London: Rex Collins Ltd. 1980, p.355.

[424] P.V. Rensberg in R.O. Niehoff: op.cit. 1977, p.140.

5.3.10 Some Problems of The Brigades

Brigades have been attempting to provide a model that would enable the creation of employment specially for the primary school leavers who would otherwise have been unemployed or underemployed in subsistence agricultural pursuit. With its employment-oriented and cost-covering strategy, the low cost Brigades provide an attraction for wide replicability within Botswana and elsewhere outside the country. However, they have enountered certain problems.

First, the Brigades are faced with competition with the formal sector of economy. The high wages and the consumption levels in towns have acted as a 'pull' effect for the Brigade trained graduates to migrate to towns for lucrative jobs, which the rural sector does not offer. Secondly, these high wages also prevent the teaching personnel from accepting jobs in Brigades which cannot afford to pay them from their earning, the kind of salaries they would demand which the modern sector offers. This problem hinders further expansion as well as provision of more efficient training because there is a shortage of skilled instructors and managers. The Brigades also have to compete directly with cheap, imported consumption goods produced by much more sophisticated technologies. To survive this competition, the Brigades have to increase the degree of capitalization and sophistication of technology used, but this will endanger its replication. Their other choice would be to reduce the prices of goods so that rural people could buy their

products instead of imported goods from town, which means further reducing the incomes of Brigades and the trainees. If income is reduced, the Brigades will then have no incentives for trainees either to acquire training or the trained graduates to remain in production units.

Since the costs in the Brigade Movement have to be covered through production, it is necessary to find markets for the goods and services produced. To a certain extent this requirement is met in the early stages by selling most of the locally produced commodities to the few salary-earners who have cash to spare. However, in a small economy where such opportunities are limited, possibilities of employment creation in the rural areas to the rate of growth of employment in the formal sector are limited.[425] Wider and more rapid development depends upon the growth of incomes and of exchange amongst participants in the rural economy. Internal exchange is very essential, but the absence of money among the people makes exchange increasingly difficult and decreases production. This problem was solved to a greater extent by creating "Boiteko" as a co-operative or communal 'swap shop' where members initially exchanged their labour and goods they produced for 'vouchers' as a substitute for money, which was used in Boiteko to buy other goods. This system helped to promote exchange of their products among poor village people with little cash. Boiteko now also provides scope for adults as

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[425] C. Colclough and S. McCarthy. op.cit. 1980, p.219.

well to acquire skills and some sort of employment for producing goods. Boiteko as a major production Brigade since its inception aimed:

1. To create through experiment a replicable model project capable of raising living standards and providing employment in rural areas.
2. To draw men and women of all ages into production and development.
3. To maximize the use of inexpensive tools and techniques of production.
4. To maximize the use of local materials in production.
5. To create single system of management, more especially systems which will lead to mutual pressures among participants for increased production.
6. To encourage co-operation and inter-dependence.
7. To encourage spontaneous capital formation and to prevent the control by ordinary people of their own enterprises and capital.
8. To impart and improve skills.
9. To broaden the horizon and to increase the awareness of participants.[426]

In spite of the problems, for over a decade and a half now, Brigades have been quite successful and have gained national and international recognition in terms of their contribution to rural development. Therefore, they have better prospects of overcoming their problems.

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[426] Van Rensberg op.cit. 1974, pp 99-100.

5.3.11 Overall Observation of The Brigades

The financial situation of Botswana being extremely poor, Brigades had to be low cost and self-supporting when the movement began. At the same time this country also lacked her own bricklayers, carpenters and other tradesmen, and the conventional secondary schools operating (only six) could not supply the skilled manpower needed. As there was virtually no vocational training in 1965, the emphasis in this field was logical and justified in view of the great development needs of the country. Since then the Brigades have developed, expanded and achieved recognition and support from the government.

The survival and expansion of the Brigade Movement in Botswana have been possible because it provided on-the-job training in a programme of serious production aiming at cost recovery and also providing necessary opportunities for education and training for employment, geared to income generation. Brigades have proved that a good standard can be achieved at low cost. The independent character of each of the Brigade Centres (13), makes it possible for Brigades to apply local solutions to locally indentified problems and prospects. Brigades are flexible institutions and recognizing the severe limitations on wage-employment opportunities, they promote self-reliance and co-operation.

An important feature of the Brigades educational programme is the inclusion of "Development Studies" to create positive attitudes towards community development and

self-help. This subject discipline exposes trainees to the social, economic and political realities of the country and enable them to understand their role in personal and community development. Especially in the case of Farmers' Brigade, trainees are made aware that their future lie in their own hands and not in the hope of wage employment. From the outset of this movement, there has been a conscious decision to create employment opportunities. Farmers' Brigade trainees are helped with an initial capital for starting collective farming. A number of Brigades have established production groups staffed by Brigade graduates and have started small and diversified co-operative ventures. Some of these production Brigades have a predominantly social rather than monetary purpose, although commercial activities serve an important function in subsidizing training work.[427]

The remarkable success of Brigades lay in its adherence to its objectives. One of the measures of success is the career prospects of its graduates and the extent to which Brigades have met the objective of training for income generation. Though data is extremely sketchy, results of a recent follow up study are given by ILO which notes that (i)83% of the trainees found employment within three months of completing the training and 11% within eleven months; (ii)80% found work directly related to their Brigade

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[427] I.L.O.: Education and Development. Report III, 1977, p.56.

training; and (iii)over half of the graduates found work and continued to work in rural areas.[428] Many graduates have been successful in finding modern sector jobs and Colclough notes that employers prefer Brigade experienced trainees to either primary school leavers or unskilled secondary school graduates.[429] Botswana with her fast developing economy needs skilled and semi-skilled manpower, and as long as this trend continues, Brigades' trainees will have better opportunities for employment.

Even though Brigade graduates have good employment chances, Brigades are looked upon as 'second choice' by many young people who have failed to be accepted into the formal academic or techanical education programmes. The pressure for certification and the increasing number of trainees appearing for Government Trade Test is an indication of a keen desire for qualification so as to get modern-sector jobs that them well. A high percentage of trainees have passed the Government standard trade test which explains that Bridages are fighting to compete with the conventional secondary schools. In Serowe Brigade there were 400 students against 700 in the Serowe secondary school in mid 1970s and Van Rensberg has spelled out in confidence:

> we intend to equal and over take that number as part of our challenge to the formal system...... secondary school will increasingly lose credibility as job opportunities decline in relation to growing

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[428] Ibid. pp 56-57.

[429] C. Calclough: "Basic Education: Samson or Delilah?" Convergence, 6:2:1976, p.55.

school output.[430]

Rensberg's hope might materialize, but as long as the rewards for secondary school graduates are higher than the trained graduates, Brigade Training may not be a 'first choice' for students. The number will any how increase or must increase because so far Brigades have attacked only a small part of the total school-leavers' problem. Their potential for expansion and replication is mostly constrained by the lack of instructors and partly by the financial resources for initial investment (though Brigades have proved that financial resource is not the major constraint). Grants for salaries and equipment or training subsidy will provide some help, but there is a limit to what the Government can provide. Greater involvement of government may affect the objectives of Brigades. More specifically as the Brigades expand, there may be a danger in the attitudes of trainees, who for reasons of prestige and competition will urge for greater formalization wishing to convert the Brigades into technical secondary schools, which they were unable to attend. There are indications that these programmes are subject to formalization by pressures generated from inside as much as from outside. The outside pressure is difficult to resist because of the prestige, status, quality and the values attached to formal academic education that rewards with certificates - the entry passes into the modern sector jobs and high wages. Brigades have so

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[430] P.V. Rensberg in R.O. Niehoff: Nonformal Education and the Rural Poor. 1977, p.139.

far survived and spread and are encouraged by the Botswana Government but only as an alternative in a dual system of education. Brigades are the seeds of an alternative to the formal system, viable and equitable and not inferior from the development objective of satisfying the basic needs of all.

5.4 Lessons from the Case Studies

Each Third World country is unique in its social, political, economic and physical environment. Education is interwoven into the socio-economic fabric of the society subjected by social, political economic constraints, and changes in any one of these institutions will affect others. Hence, no country can serve as a model to be directly transfered as a packaged programme into the other to yield similar results, unless the borrower country is identical in the socio-political structure or willing to substantially transform its framework. However, lessons can be learnt from other country's experience, but these are more often general, rather than specific.

Taking the case of China, individual elements of Chinese model or version of that model are unlikely to be successfully transfered to other Third World countries, because many important elements of China's social, economic, political and incentive systems are unlikely to be found in other countries. If a country is willing to adopt Chinese

model of development, it must be transfered as an integrated package including a complete replication of the economic, social and political institutions, and policies including a communist revolution. It is not worth paying this high a prize for development. However, a more general lesson China's experience provide for other countries is of involving people in decision-making of their own development, so that they become active participants of development and not passive objects to whom development strategies pre-determined by the bureaucrats are delivered. China has involved increasing numbers of people, especially at the grass root level to transform the rural sector into a self-reliant economy and to break the bondage of centre-periphery relationship within the country. It has demonstrated that the gulf between urban and rural sectors, between peasants and workers and between mental and manual labour can well be bridged by combining productive labour and education, geared to mutual co-operation and willingness to pursue the common goal.

The self-financing characteristic of work study education is an alternative that can be pursued in many Third World countries, especially in rural areas to make education more meaningful and relevent to local needs. Through such an approcah, rural areas can share the educational burden and make education widely available to all and thus; lack of financial resources will not be a major constraint for expanding education. Secondly, China

has demonstrated that integrating productive work with education results in the development of infrastructure in local communities and the provision of goods and services not previously available. It will also prevent to a greater extent, the migration of the ablest to urban areas. The development of local production through the concept of work study education can provide decentralization and facilitate local control.

China' experience also provides a lesson that a country with massive human resources, must pursue development by utilizing labour-intensive methods than capital-intensive ones, so that large numbers of skilled and semi-skilled manpower necessary to serve the majority of people are produced. This short-term results can be met by incorporating labour in curricula first in rural areas where education is unavailable and gradually this policy can be introduced in other rural schools, finally moving on to the urban schools thus making productive labour a part of education system. It is only when it becomes the total focus of a national educational system, implemented with great political determination, that the incorporation of production activities in the curriculum and activities of schools will be sustained. Countries pursuing socialist polcies will find it easier to incorporate work study concept.

The most important lesson that can be learnt from Tanzanian's experience is that radio can be effectively

utilized to reach a large rural population in dispersed and isolated areas. It is economical and demonstrates that learning can be applied to improve one's life when radio programme is supplemented with organized group discusion accompanied with printed matter. It is evident that in general terms radio study group campaigns offer wide scope for education. They are formidable instruments of development for bringing about change for liberation. To quote again Nyerere, who declared that development should help to expand people's consciousness and power over themselves, their environment and societies:

> Education has to increase men's (women's) physical and mental freedom....to increase the control over themselves, over their lives, and the environment in which they live. The ideas imparted by education, or released in the mind through education should therefore be liberating ideas. The skills acquired by education should be liberating skills... In particular it has to help men to decide for themselves..in co-operation..what development is.[431]

Through participation on equal terms, women will be liberated from the domination of men when they realise that they posses more experience and wisdom in some areas than men. The young will be liberated from the unjust authority of elders, when it is recognized that they possess more recent facts where the learning they may have picked up is supported by the study material. Elders and illiterates will be liberated from the scorn of the better schooled when they play just as important a role in this educational game. With

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[431] J.Nyerere: "Liberated Man: The Purpose of Development". Convergence, 9:4:1976, p10.

all its side effects, the radio study group approach, by raising people's awareness of the causes and cures of social problems, might even help to mature the people politically and thereby adult education as an alternative nonformal strategy may inspire a desire in people for the kind of change they wish to create. Tanzanian experience can hopefully serve as an encouragement as well as a model for other countries. This nonformal education method for adult can be duplicated to yield similar resultsin a country which is persuing socialist policies, and specifically if a country does not have the multiplicity of language, radio study groups could be very economical and at the same time effective.

Brigades of Botswana have demonstrated that skill training approach for school leavers has a significant impact on rural employment and development, when teaching of vocational skills is pursued by the creation of employment in rural areas through production co-operatives. They have shown that the threat of a large number of primary school leavers and dropouts entering the job market without any hope of achieving satisfaction, can be minimized (and eventually eliminated) by establishing diversified production enterprise, and pooling the resources of people and working together.

Even though, marketing and staffing have presented problems, Brigades' experience suggest that the difficulty in marketing can be worked out by devising appropriate tools

and techniques, continuing diversification of skills and introducing and producing new and different products relevant to local needs. Providing employement oriented nonformal education relevant to the job market in rural areas, many Third World countries may not only be able to minimize the problem of unemployment, especially of the primary school leavers, but also transform many youths from being partially educated, unskilled and unemployable individuals into semi-skilled, educated and employable citizens making them generally better equipped for the world of work. When employment oriented nonformal education is pursued by combining education with production, specially with an inclusion of the subject, "Development Studies", it creates among the trainees, positive attitudes towards community development and self-help and enable them to be exposed to the social, political and economic realities of the country. When exposed to such realities, students realise the importance of their role in the development process and hence become active participants and not remain passive receivers of pre-packaged development strategies handed down by top officials.

Brigades have shown that lack of financial resources is not the greatest constraint, and that it is entirely feasible to operate cost-covering, self-sufficient, employment oriented nonformal educational institutions in which the productive work of students and instructors can generate the necessary resources. Such cost-covering

institutions not only provide a feasible means of making educational expansion easier, especially in the low income countries, but also provide the right context for socially and economically relevant learning , both of occupational and general nature. Both China and Botswana emphasize on combining education with productive work.

However, a political will on the part of the government is necessary to recognize and identify the problems of the country fairly clearly, and find its own solutions to the constraints and develop its own appropriate models, systems, approaches and organizations. Each country should identify innovations that are politically tolerable, but nevertheless which have a potential for social transformation.

6. LIMITATIONS AND POSSIBILITIES OF NONFORMAL EDUCATION

The case studies presented in Chapter 5 demonstrate some of the potentialities of nonformal education efforts as undertaken in the three Third World countries with differing socio-political structures - ranging from revolutionary socialist China to partially socialist Tanzania and capitalist Botswana not antagonistic to certain aspects of socialism. These programmes have shown that large-scale expansion of nonformal education in developing countries is economically feasibile, but the degree of feasibility is greatly influenced by the changes in the socio-economic infrastructure such as these countries have undergone. This chapter will examine some of the limitations of expanding nonformal education on a large-scale as a part of the national development strategy. The limitations will be discussed using evidence from some of those countries where nonformal education has faced resistance. It will also pin point those areas, where expansion of nonformal education without facing much resistance from the masses, is possible.

Large scale expansion of nonformal education is economically feasible in developing countries if political conditions are favourable, because political factors play an important role in the success or failure of any plan of action. The political forces that are manifest in the

behavior of governments, as Coombs and his associates[432] concede, are often rooted outside the government in a wide variety of economic, social and geographic sub-groups, each having its own particular interests, biases and aspirations. Any changes proposed, will therefore risk the opposition from particular groups and individuals who see them as threats to their own position or welfare. Depending on the strength, character and how well they are exerted, political forces of opposition can make or break a policy, plan or programme, irrespective of how well conceived or intended it may be. Without political backing, nonformal education programmes may face difficulties in getting support from the government, especially in terms of acquiring public resources which are essential either for their initiation or expansion.

The main issue concerning resources is how to get more of them, and how best to deploy whatever resources are available. The rural areas of LDCs have an abundance of potential and untapped resources. For example, they can borrow the unused building facilities and equipments, services of volunteers, time from radio or T.V. stations to operate nonformal education efforts, use self-support to construct building facilities, sell products produced by programmes and mobilize local government and community contributions. However, it cannot be assumed that large-scale expansion will be possible without a heavy

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[432] P.H. Coombs et al.: New Paths to Learning. 1973, p.75.

allocation of additional financial resources from national treasury. Hence, in addition to what these programmes mainly receive from the private sector of the economy, they also require resources from the public sector. But from the discussion in Chapter 3 (3.1.2), it is evident that most of the Third World countries have already escalated their educational budget to a level, where it is difficult for them to increase expenditure any further even for nonformal education. In terms of scarcity of resources, not only has the education sector to compete with other sectors of the economy, but the competition is also within the system.

Top decision makers at the Central Government, each year face this controversial issue of how to enlarge the total resources for education, and how best to divide them between the urban and rural sectors and between the formal and nonformal education. In view of the growing criticism about the declining quality of education, there is an increasing demand for additional resources to improve the efficiency of the existing system. As the percentage of national budget required for education continues to escalate, nonformal education will have less chances of acquiring a desirable financial support. Hence, any increase in nonformal education will have to come from the reallocation of resources now used for the formal system of education, and this will present its own problems.

With the scarcity of resources getting accute, and an inexorable trend of ever rising costs in education due to

the demand for secondary and higher levels of education with the expansion of primary education, rising expectations regarding the quality of education, nonformal education will have to become a tough competitor for funds. The success of nonformal education in this battle, depends partly on how effective their programmes are to achieve national priorities over the conventional system of education. Experience with three case studies dealt in the thesis, and a wide variety of diversified programmes ranging from small pilot projects to large-scale national efforts documented by the ICED and the Michigan State University,[433] it becomes clear that nonformal education has many advantages in meeting the learning needs of people and society. However, effectiveness of nonformal education is alone not enough to secure a substantial transfer of funds to this sector from formal education sector. A lot depends on how much determination a country has to improve the well being of its rural people to redeploy the existing public revenues on education by giving larger share to nonformal education.

While nonformal education has proved effective to gain the confidence of government as a means of national and rural development, the important question is, whether it is possible to divert enough resources without any resistance from the beneficiaries of formal education. Since the elite groups benefit from higher education and can exert influence

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[433] See M. Ahmed and P. Coombs: Education and Rural Development: Case Studies for Planners. 1975.
Klies Russel: Case Studies in Nonformal Education. 1974.

over major decisions, they are only likely to support resource allocation to programmes which are compatible with their own interest. If resources are shifted away from upper secondary and university education to primary education let alone the nonformal education, then the upper and middle income parents, whose children will be denied access to higher level of schooling that enhances their socio-economic status, will resist. It is this group, upon which the leadership of the country largely depends for active political support. If the national budget allocated to formal education as a whole is reduced to divert resources to nonformal education, the political leadership will not receive the necessary support for such decisions.

However, if the government is committed to giving priority to nonformal education, it must also have support and demand from the masses, because the greater the public demand is for any education, the better are the chances of devoting public resources to it. This indicates that national commitment for nonformal education alone is not enough, popular demand must also be changed. But support will only be changed if people perceive greater benefits accruing from nonformal education. This signifies that nonformal education must prove rewarding (this point will be discussed little later in the chapter) to the general populace. Without the acceptance of nonformal education by the masses, demand for it will be minimal. The demand for formal education will therefore continue to increase, and

the political pressure will ensure that the bulk of the resources continue to be devoted to the formal system of education.

If the government is committed to give priority to nonformal education, the major risk which it is likely to run into, is the rejection from the masses who deem it as "second rate" education, because of the benefits individuals receive from it are likely to be lower than that they would accrue from formal education. Existing employment policies and incentive structures put a premium on formal credentials and diplomas and handicap nonformal education. La Belle and Verhine[434] examined the potential contribution of nonformal education in occupational mobility in both, urban and rural areas in Latin America. Their analysis indicate that employers value formal school credentials as indices of the attainment of elite cultural attributes, and in this context nonformal education does nothing more than prepare non-elites to be more productive workers while relegating them to relatively inferior status position. The authors' conclusion was that "as long as the credentials of formal schools continue to be the most salient factors in job market; nonformal education, which does not award traditional certificates will do little to bring about significant income and status benefits to individuals in the

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[434] T.J. La Belle and R.E. Verhine: "Nonformal Education and Occupational Stratification: Implications for Latin America". Harvard Education Review, 45:2:1975, pp.160-89.

economically disadvantaged countries."[435] With respect to the view presented by La Belle and Verhine, then several attempts of strengthening and diversifying nonformal education in the name of social justice, will probably be more frustrating to its clienteles when it comes to acquiring paid employment. Jobs are usually distributed mainly on the basis of formal paper qualifications. Therefore, until and unless the value and importance attached to formal paper qualifications are de-emphasized, nonformal education cannot significantly equalize access to employment and as a result popular demand for it is not likely to increase.

The question of de-emphasizing formal credentials is possible by deformalizing schooling which will undoubtedly face resistance from the major beneficiaries of formal education. The magnitude of the socio-political implications of any such reforms in schooling can be great. Attempts at such reforms as Ahmed[436] maintains, can only be possible if a country has a clear vision of its future, a sense of mission that is shared by the people, a sincere and dedicated political leadership, and a commitment to a strategy and plan of development. Countries like China, Cuba and Tanzania are examples with strong dedicated leadership and political organizations with mass participation. While China and Cuba have attempted to deformalize schooling

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[435] Ibid. p.160.

[436] Manzoor Ahmed: The Economics of Nonformal Education: Resources, Costs and Benefits. 1975, p.42.

through revolutionary efforts, Tanzania pursued radical reforms in schooling without any violent revolution. While the former two countries have succeeded, the later is facing difficulties.

In the case of revolutionary China that has been discussed in detail in Chapter 5 (sub-chapter 1), educational reforms brought about during and since the cultural revolution were successful in deformalizing schooling and breaking the bond between schooling and paper qualifications that were associated with the socio-economic rewards. Such a reform that enabled full employment, equitalbe income distribution at a relatively low level of per capita income; bridged the gap between the modern and traditional sectors, between the more and less educated, and between the rich and poor. However, some of the formal characteristics are being gradually re-introduced in the system indicating that complete deformalization of schooling though successful in a revolutionary country, faces continuing problems.

Similar to China, though with some differences, is the case of revolutionary Cuba. Simkins[437] noted that since Cuban revolution, the country has been making serious attempts to deformalize schooling by bridging the gap between mental and manual labour through 'escuela en el campo' (schools in the countryside) and 'escuela al campo'

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[437] Tim Simkins: "Planning Nonformal Education: Strategies and Constraints". Prospects, 8:2:1978, p.191-192.

(schools to the countryside). The latter approach of Cuba is similar to that of China where urban youths are sent to the countryside to imbue them with proletarian attitudes and socialist consciousness. While China succeeded in achieving total reform, Cuba has not. Simkins doubts that even with substantial social and economic reforms in Cuba, the 'schools to the countryside' hardly involved a substantial remodelling of the traditional concept of schooling. There still exists the formal characteristics like classroom teaching, grades and traditional examination-oriented criteria used for evaluating schooling. Arthur Gillette in his study of "Cuba's Educational Revolution" noted that problems still exist in 'Schools in the Countryside' where classroom work resembles traditional classroom work.[438] Marvin Lerner makes an identical point that examinations and grades are a key source of motivation in the teacher dominated classroom in Cuba. He also noted that classroom habits of longstanding are considerably more difficult to change.[439] The point Simkins, Gillette and Lerner make is that the problems are still there to be overcome in Cuba's educational revolution, which suggests that even in societies where revolution has taken place, the constraints which function to hamper the deformalization of schooling are great.

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[438] Arthur Gillette: Cuba's Educational Revolution. London: Fabian, 1972, p.55.

[439] Marvin Lerner: "Cuba: Combining Formal Schooling With Practical Experience". in Ahmed and Coombs: Education and Rural Development. 1975. p.107.

Tanzania, which is positively oriented towards China has been pursuing socialist policies under the leadership of Nyerere, who is convinced that socialism is not a utopian vision and that it can be built in Africa. Though Tanzania is not a revolutionary country like China and Cuba, nevertheless it has attempted radical reforms in its educational system taking a positive step in de-emphasizing formal educational credentials by attempting to break the hierarchical nature of formal education. Kassam noted that in Tanzania:

> "..it is no longer automatic for secondary school graduates to get direct access to university education. Instead they have to work first for a number of years and only after proving their work competence and other abilities and attitudes and obtaining recommendations from their work places and the TANU branches, will they be considered for university education."[440]

This step was taken in one the resolutions popularly known as the 'Musoma Resolutions' passed by the National Executive Committee of TANU in 1974. Another important reform that Tanzania has introduced to deformalize schooling is the integration of work, based on the work-study concept of China i.e. integrating formal and nonformal education. Gillette's study on Tanzanian education revolution does relveal the fact that complete merger of formal and nonformal education has not (yet) taken place and that this revolution is an ongoing process that has not (yet) been

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[440] Yusuf O. Kassam: "Formal and Nonformal Education and Social Justice". Prospects, Vol.7, No.3, 1977, p.248.

fully victorious.[441]

How far the reforms have been successful in deformalizing schooling is yet to be evaluated, but from what Simkins[442] noted about Nyerere himself pointing out the problems confronted, it appears that efforts at schools' reforms aimed at removing many of their present undesirable characteristics have met with resistance. And despite the clarity and the radical nature of objectives, the priority given to educational reforms and the strength of its leadership, Tanzania is experiencing great difficulty in deformalizing its schools. This indicates that Tanzanian educational revolution has still a lengthy and difficult path to travel. This is only an indication of the magnitude of the problem. Knowing this, Tanzania has laid emphasis on adult education where resistance is usually less and results are better, and this is evident from the mass education campaign.

Without the deformalization of schooling, it is unlikely that the value and importance attached to formal credentials will be de-emphasized. So formal credentials will continue to occupy an upper hand over all nonformal education programmes, which in fact provide relevant skills knowledge, attitudes and effective training, but do not "certify".

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[441] A. L. Gillette: Beyond the Nonformal Fashion: Educational Revolution in Tanzania. Massachusettes, CIE, 1977, p.310.
[442] T. Simkins: op.cit. p.191.

Nonformal education may not be the first priority of an individual, but in view of the financial constraints that limit the expansion of formal education and access to it, children and youths will only resort to nonformal education as an alternative choice. Those, most likely to resort to this alternative are likely to be the "push outs", "pull outs" and "drop outs" for whom it provides a "second chance". However, if nonformal education is provided as a substitute or an alternative to formal education in those areas where the government is obliged to provide formal education, then there is more likelihood of unwilingness in accepting such opportunities. This is especially applicable to primary schooling in rural sectors, where due to resource constraints many countries are unlikely to provide universal primary education in the near future. In such cases where provision of primary education is economically not feasible, institutions like the World Bank have suggested that the governments of developing countries should explore alternative approaches, atleast as an interim solution.

Both the World Bank and the Unesco advocated that universal basic education as an alternative approach to UPE, should be given a top priority in educational policies.[443] World Bank Education Sector Paper observed that:

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[443] For a detailed account of basic education see H.M. Phillips Basic Education: a world challenge. 1975. For a brief controvercial account see C. Colclough: "Basic Education: Samson or Delilah?" Convergence, 6:2:1976, pp 48-65.

> Basic education is an attempt to meet the needs of substantial proportion of population who do not have access to even minimum educational opportunities... It is intended to provide a functional, flexible and low-cost education for those whom formal education cannot yet reach or has already bypassed.[444]

This indicates that basic education can be an alternative approach to primary education for children of that age group, as well as provide a "second chance" for youths and adults who have had no opportunity of primary schooling. Basic education is defined as a four to six years of primary schooling or its nonformal equivalent. Coombs and his associates[445] in their ICED study adopted a broader and more functional view - one which equated basic education for rural children and youths with six categories of minimum learning needs. These learning needs in particular include:

1. the acquisition of constructive attitudes, character traits and values conducive to effective personal development and contributing to community and national development;
2. a functional grasp of literacy and numeracy;
3. scientific outlook and rudimentary understanding of one's natural and social environment;
4. basic knowledge and skills for rearing a family and managing a household;
5. functional skills and knowledge for earning a living, and
6. the knowledge, skills required for effective civic participation.

As Coombs et al. maintain, these are the minimum needs that must be satisfied in the course of growing up, if young people are to take command of their own lives and make the most of their opportunities as determined by their particular socio-economic circumstances. Basic education

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[444] World Bank: Education Sector Working Paper. 1974, p.29.
[445] Coombs et al.: op.cit. 1973, pp13-15.

will therefore, vary from one society to another and from one group to another. Since it will be providing learning needs and is intended to be terminal and geared explicitly to the requirements of rural life rather than to the next level of education, it will face difficulty in surviving. This is so because, such an education which is more relevant to the needs of the community and help people to live a better life in rural areas, at the same time confines them to the rural life limiting their access to formal schooling from which the privileged few benefit and which provides access to the high income jobs in society.

Evidence form Chapter 3 (3.1.3 and 3.1.4) provides a general consensus that the conventional primary school system is not particularly effective in contributing to an improvement in the quality of life. Only a small proportion of students from the primary schools enter the secondary schools, while the rest swell the category of unemployed or underemployed. No matter how slim the chances of advancement and simultaneous access to economic and social mobility may be through formal schools, rural masses will always be willing to take the risk rather than allowing their children to be channelled into manual labour at an early age. The main reason for such an attitude is that, formal schooling represents their only hope of escape from rural areas and the subsistence and below subsistence level of living, which usually accompanies that life. If basic education or its equivalent nonformal education is provided as an alternative

terminal education to primary school for children of that age group, the only chance they have of changing their life style from that of their parents by moving up the educational ladder and acquiring better occupations, will be taken away from them.

To take this argument a little further, it can be said that an alternative education implemented for one segment of the population - usually the rural segment - further institutionalizes a dual system of schooling and therefore will fail to win acceptance, confidence and support of rural people. It will be discriminatory, if few have access to the conventional primary schooling that gives opportunity for further education, providing access to jobs requiring mental labour usually in the modern sector which yield higher financial and social benefits to individuals. With only nonformal education available to the poorer section of the society, majority will be channelled at an early age into manual labour that provides no educational mobility, but gets them stuck in the traditional sector, where the monetary benefits are much lower. In such a dual system, the question then arises is, how to create a will in the people to become better farmers and entrepreneurs in rural areas than to join the modern sector when the "pull" and "push" effects respectively from urban and rural areas are great. As long as the overwhelming benefits (monetary and social mobility) go to those with formal education, it is unrealistic to promote a "second rate" education for those

living in the traditional sector as a means of lowering their occupational aspirations. A probable answer to this problem is to alter the financial benefits or social incentives that are associated with education.

To motivate the masses to accept nonformal education the income gaps between the modern and the traditional sector jobs must be reduced. This, as Bacchus maintains, is possible only by concentrating development in the traditional sector which to a large extent has been relatively neglected, and simultaneously reducing the rates at which the incomes have been increasing in the modern sector in relation to and at the expense of the traditional sector.[446] He suggests that if reward structure of the society is radically changed to enable those in the traditional sector to earn a reasonable income as compared with those with formal education working in the modern sector, then it is likely to reduce, though not eliminate the demand for the type of formal education which is irrelevant to the development of life skills needed in the society. Bacchus's main argument is that "unless there is a massive structural transformation in the reward system of the developing societies, nonformal education will not be fully accepted by the general populace."[447]

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[446] M.K. Bacchus: "Structural Transformation as a Prerequisite for the Success of Nonformal Education Programmes in Economically Less Developed Countries". Canadian and International Education, 8:2:1979, p.90.

[447] Ibid. p.87.

Great income differentials is thus a handicap to an increased demand for nonformal education. Therefore, wage differentials should be narrowed not only between the traditional and modern sectors, but also between the various levels of occupations. This can be pursued by stabilizing (or reducing which is not easy) higher level salaries and gradually increasing lower level salaries. As Carnoy maintains, by the State intervention through price control and wage fixing on behalf of the middle class or low-income workers and peasants it can be possible to effectively shift income from higher groups to lower groups.[448]

However, such a strategy would undoubtedly face opposition from the interest groups of both the sectors. For instance, the interest groups in the modern sector where the cost of living is usually higher than in the traditional sector, would oppose either stabilization or reduction of income at the higher levels of jobs. This is due to the fact that majority of the upper class members pursue for upper level positions in which social and economic benefits are higher. In the traditional sector, if the wages of the workers and farmers are increased, the traditional elites or the landlord class would lose their major profits that they gain from cheap labour and hence they would oppose to a strategy of reducing income differentials or increasing lower level incomes. Although nonformal education furnishes

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[448] Martin Carnoy: "Can Educational Policy equalize Income Distribution?" Prospects, 8:1:1978, p.10.

its clientele with beneficial skills and knowledge, it does not yet provide the same social and economic benefits like the formal education, and therefore it may not be willingly accepted by the masses.

There is evidence from countries where experiments with nonformal education programmes as dual system have achieved only limited acceptance by parents. Phillips[449] cites the case of Madagascar, where four year basic education cycle was introduced in 1962 intended to cover 660 classes by 1970, providing education for 10% of primary school children. Their efforts were successful in covering only 100 classes i.e. 1.8% of the pupils. The reason was that the rural masses considered this plan prejudicial, because it tied their children to peasantry while others enjoyed the privilege from the regular primary school.

Another example that was analyzed by IEDES and Grabe can be cited to illustrate the essence of the problem.[450] Rural Education Centres (RECs) of Upper Volta were established in 1961 to provide a rural alternative to primary schools for children aged 14 or 15. This was in fact, a "second chance" given to children for whom the conventional schooling had already passed by. This three year education cycle was intended to provide vocational and

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[449] H.M. Phillips: op.cit. 1975, p.210.

[450] See IEDES and S. Grabe: "Upper Volta" An Alternative to Primary School" in M. Ahmed and P.H. Coombs (Ed): Education and Rural Development. 1975, pp.335-364.
C. Colclough and J. Hallak: "Some Issues in Rural Education, Equity Efficiency and Employment". Prospects, 6:4:1976, pp.518-520.

literacy training programmes. It was intended that after 1970 conventional primary school would remain static, while the resources from primary school would be redistributed to expand RECs. However, after a period of growth, the RECs ceased to expand further, while the demand for the expansion of primary schools continued. IEDES concluded that after ten years of operation, the programme of rural education in Upper Volta with its 737 centres (the number reduced from 759 in 1970/71 to 737 in 1973) and 24,164 students, had reached a state of stagnation if not degeneration.[451] There was less demand from the villagers who had hoped that RECs would be a temporary expedient that would be ultimately replaced by the regular primary schools. When it did not happen, the RECs recruitment efforts faced increasing resistance from villagers, whose children from RECs did not have a chance to re-enter the post-primary schools.

The lesson that IEDES and Grabe drew from the experience of Upper Volta was that rural education cannot be effective as long as it stands a symbol of discrimination and will fail to get the acceptance of rural masses. They however, suggested that the stigma of prejudice can be removed and the confidence of masses in nonformal programmes can be regained, if there is a government commitment supported by necessary action to build a unified national system of basic education. Similarly, Colclough and Hallak suggested that the only way the REC system could continue to

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[451] IEDES and S. Grabe: op.cit. p.361.

work, would be to develop it into a single unified system for all children in the country which would replace primary schooling. Another suggestion given by Grabe was that of removing the more detrimental elements of a dual system. Although what these detrimental elements are, have not been spelled out, yet it is not difficult to assume that these could be the wide income differentials that accrue to individuals from two systems and the two sectors - modern and tradtional - and the cut off point from conventional schooling that prevents children from having further educational opportunities and the reward of white-collar occupations.

What seems likely is that any nonformal educational programme which leads to essentially a dual system will face a difficult future. Nonformal education may provide an effective alternative if it is the only system, but will certainly face difficulty surviving in the presence of competing formal education system which has the status of allowing its graduates to gain access to higher level societal rewards. Therefore, efforts must be made either to deformalize schooling or reduce income differentials that can influence children's attitudes and aspirations to make a positive contribution to their personal development and that of their community. Such changes are not easy to pursue in a society without either the commitment or motivation of making substantial structural changes. Hence, like the "open door policy" of China, atleast provision can be made for

students from the dual systems that operate outside the conventional system, to enter or re-enter the conventional schools if they wished to do so. In essence, such provision will help to eliminate discriminatory attitude, enabling eligible or desirous students to continue their education. What is important here is that children must not be denied further educational opportunities for the reason that they had not been initially educated in the formal school system.

In many provinces of India, provision is made for girls to appear for grade ten examinations and for boys grade seven examinations without having gone to any formal school. So those educated outside the school system are not denied opportunity of schooling. Such a strategy whether in India or elsewhere that enables mass educational participation and acquisition of formal credentials faces problems by aggravating the issues associated with formal schooling that have been discussed in chapter 3. The main issue of concern here is that the "relevance" which nonformal education programmes advocate, is likely to be affected if their efforts are directed towards preparing students who would get back into the formal system. The solution to these two problems, of "retaining" the relevance of nonformal education to local needs and "preventing" the students from getting back into the system, brings us back to the same question of "reducing income differentials" and in addition to this, concentrating development efforts in rural areas. This can be done by providing the physical infrastructure of

development such as transportation and communication facilities, irrigation and electricity facilties, and institutional infrastructure such as financial and credit institutions and other public services; thus improving the productivity and employment positions in rural areas. This would make rural life style attractive enough to retain much of its potential human resources. However, eligible students must not be denied opportunities to enhance their educational mobility.

In this context Phillips suggests that the provision of intermediate links which he characterized as "ladders", "buffer cycles" and "bridges" must be made between formal and nonformal education. This he maintains would facilitate individuals to move backward and forward between formal and nonformal education or move out of the educational system as a whole.[452] He proposed the intermediate links, so that the talented and efficient students from nonformal alternatives would not be denied educational opportunities confining them to rural areas. In Peru there are two streams of basic education, one is more academic and linked with the world of work and the other directly oriented to work. These two are interlocked in a system of planning by districts which includes 'nuclear schools' for those children living in the districts which provide limited education opportunities.[453] The 'Godfather school' of Madras in India, is similar to the

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[452] H.M. Phillips: op.cit. see pp 169-206.
[453] Ibid. p.210.

nuclear school idea providing opportunities of entry from basic education into the conventional upper primary school.

There are some nonformal education programmes which impart vocational/technical training in Latin America designed to enable graduates to move into more traditional and prestigious forms of education. La Belle and Verhine noted that Havighurst and Gouveia had reported about some of the vocational schools in Sao Paulo which have achieved legitimacy in the eyes of middle class, because they are structured to qualify graduates to pass the rigorous university admission test.[454]

The Brigades of Botswana, the Village Polytechnics of Kenya, Mobile Trade Training of Thialand are some of the nonformal education programmes that supplement formal education by providing on-the-job training to primary school leavers. Students from these programmes after completing their course, like the formal technical school graduates, take the same government trade-tests to obtain certificates that enable them to acquire skilled or semi-skilled jobs in the modern sector. In the case of Botswana Brigades, the training experience itself is a certification for the trainees and as Colclough noted, the employers prefer trainees from Builders' Brigades rather than primary school leavers.[455] Such strategies which link nonformal education to formal education or provide more equal opportunities to

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[454] T.J. La Belle and R.E. Verhine: op.cit. p.180.
[455] C. Colclough: 1976, op.cit. p.55.

those completing nonformal education programmes of training are obviously more attractive. They not only enable individuals to acquire productive skills but also the legitimate credentials required for upward status and income mobility.

If there is no chance provided for deserving clientele from nonformal education (especially where it is a substitute for formal education) to enter or re-enter formal schooling, and further, if employment policies and incentive structures continue to put a premium on formal credentials and diplomas, then the pressure from masses is likely to be for the provision of formal education, or alternatively they would influence the formalization of nonformal education. The evidence of such a possibility is available from Afghanistan, where a "village School" system has been established utilizing local and self-help efforts. This system was developed by providing three years of basic education, but once the village schools began to have children graduate from grade III, they generally transformed them into traditional primary schools.[456] Even the early experiment of Swaneng Hill Secondary school at Serowe in Botswana[457] is an example of pressures from both students and parents with political support that can force the formalization of nonformal education efforts. Swaneng Hill school, having successfully operated for eight years with

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[456] C. Colcough: op.cit. p.55.

[457] See the begining of the sub-chapter 3 in Chapter 5.

distinct objectives, today is no more than an ordinary secondary school of Botswana.

The pressure for formalization is not likely to be only on nonformal education programmes that are promoted as substitutes for formal education, but also on those that complement and supplement formal schooling. This happens especially when these programmes gain popularity. Although it is not neccesary that nonformal education will eventually be formalized, yet there is always a danger that initially successful programmes are likely to be pressurized by the clienteles for formalization. The dangers are always present in the attitudes of clientele who continue to quest for education of any form as a means to escape from the rural areas to urban areas. Therefore, they would attempt to exert pressure in appropriate places to assure that nonformal education programmes would eventually emulate formal education in the pattern offered and in the certification awarded at the end. The pressure for certification evident from the Brigades of Botswana resulted from a desire by students for urban-oriented employment.

It is not only the clientele of nonformal programmes that might exert pressure for formalization of nonformal education, but as Coombs and his associates affirm, the pressure may originate both from the national bureaucrats and the managers of the programmes. They concede that in order to gain professional respectability and proper support, the managers of these programmes sometimes copy the

practice of formal education and thus defeat their own purposes by surrendering their most important freedom to be different.[458] The Village Polytechnic in Kenya is an employment-oriented nonformal education effort, which provides diversified skills to the young rural people contributing to rural development. This programme has won an international applause as a home grown product and its potentiality led to its expansion. But Kipkoris[459] noted that those charged with Village Polytechnic management have shown a tendency towards formalizing their system, which in turn has suggested the need for certification, the magic of which the Village Polytechnics cannot or in fact do not dispel. However, most of the nonformal education programmes, especially those which are employment-oriented including the Brigades of Botswana and the Village Polytechnics have adhered to certain of their important objectives, despite the pressure - from inside as well as from established values and attitudes from outside - for formalization. This has been mainly possible due to intelligent, devoted and sustained efforts made by their organizers and people involved in the programmes. There is, however, a fear that if government involvement is increased, they may lose some of their autonomy.

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[458] Coombs et al. op.cit. 1973, p.62.

[459] B.E. Kipkoris: "Kenya: development and Co-ordination of Nonformal Education Programs". in M. Ahmed and P.H. Coombs: Rural Education and Development. 1975, p.195.

Although nonformal education may provide a dual system when promoted as a substitute for formal education especially for primary school children, yet such a policy is likely to be pursued in most of the Third World countries. Given the situation of most of the LDCs, especially in the low-income countries, where more than half of the children have no access to any kind of education, there is a less hope of extending the regular school system. These countries have already reached the maximum level of educational expenditures and hence any increase in primary schooling will have to be diverted from secondary and higher education. Given the importance attached to higher education by the elite groups, who have considerable influence over such decisions, it is unlikely to happen. When regular school systems cannot be provided, and for the fear of creating or institutionalizing a dual system if an alternative nonformal education is not pursued, then many children will be left with no education at all, although it is said to be their basic human right. In this situation the choice has to be made between the provision of some kind of "terminal education" that will make their lives better attuned to the environment they live in or "no education". It is not logical to pursue an education which will benefit only a few at the expense of majority. So as Duncan Ballantine the former Director of the Education Department of the World Bank maintains, the choice is not between the formal education as the "first class" and nonformal

education as the "second class", but the choice is between the "second best" and "nothing".[460]

Therefore, nonformal education as a dual system already existing in many countries is going to continue and in most cases a dual strategy will have to be pursued if a country's committment is towards expanding educational opportunities for all and also contributing to the national development. Even a country like China with her great population started out with a dual system i.e. "walking on two legs" as the Chinese call. It is this strategy that enabled China to extend education for all and helped in removing the barriers to development. The place China occupies today is the result of an initial dual strategy even though there were other important factors that have contributed to her self-sufficiency. The point is that supporting and furthering a more egalitarian development is possible in the context of a society that has already undertaken major structural changes, until then, a dual strategy must persist. Such a strategy may not be an immediate solution to equity, but certainly it will enable minimization and eventual elimination of destitution among masses. A more realistic alternative strategy would however be of merging formal and nonformal education where each of them maintain their relative strengths just as Brembeck concedes formal and nonformal education are two learning environments each

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[460] D.S. Ballantine: "World Bank Policies for Education". in R.O. Niehoff: Nonformal Education for Rural Poor. 1977, p.47.

with specific capacities to perform different educational tasks. If the merger of formal and nonformal education is implemented on a large scale as a part of national plan, then there will be a less danger of institutionalizing dualism.

From the foregoing discussions, it becomes clear that successful implementation of effective nonformal education programmes, especially as meaningful alternatives will not be possible on a large-scale if the reward structure in the society is associated with the formal education credentials. If nonformal education is to gain full acceptance by the general populace, it should be introduced without the penalty imposed by requiring formal paper qualifications for all jobs and the move towards a socio-economic reward system that will enable reasonable earnings in the traditional sector. Otherwise the formal system will continue to carry prestige and status and the competition to strive for this prestigious education will increase, attracting more and more rural population to escape from rural areas. The rural sector will then continue to lose her potential human resources which can otherwise make a meaningful contribution to rural development.

While efforts should be made to overcome these problems of changing the fundamental socio-economic structure of the society which is generally not easy, efforts must also be made to strengthen the existing nonformal education efforts in parallel with the continued (gradual) expansion of the

formal education. At the same time provision must be made to enable the movement of deserving clientele from nonformal to formal education system. In this way, these two systems will not be rivals, but be complementary to each other with nonformal education filling in the void created by formal education.

Nonformal education can complement formal education by its integration into the formal system, but where it is not possible it can complement schooling by out-of-school activities such as those related to agriculture and local industries for children and youth to equip them with the skills needed in the world of work. Out-of-school activities can be provided through young farmers' clubs or centres, national youth services, boy scouts and girl guides. It can supplement schooling by picking up where formal education leaves off. This is the most important aspect of nonformal education for it provides school leavers and the early dropouts with skills and knowledge through on-the-job and pre-job training either for paid or self-employment.

A more possible and safer step that does not involve the danger of institutionalizing dualism, but provides effective results, is the expansion of nonformal education for adults. From the case study of "radio study group" approach in a mass education campaign in Tanzania, it appears that this is the area where nonformal education could be implemented successfully on a large-scale as a national development strategy. The fact is that adults do

not hold high expectations in terms of urban employment. They can be provided with skills and knowledge to enhance their productivity and also improve their lives in the rural areas. There are usually less pressures from them either for formalization or modern sector employment. The outcomes of the programmes for adults are likely to be great, since they provide opportunities for people to be involved in the development of their own affairs.

Entrepreneurs like skilled independent craftsmen and farmers are less dependent on the educational hierarchy. These persons who are usually engaged in subsistence farming and nonfarm and entrepreneurial activities like tailoring, dress making, masonry, and carpentry, do not have to rely on commercial and industrial reward structure, but instead through their hard work and efficient skills they can rely on themselves to draw their reward by increasing the productivity they themselves control. This group forms a most viable target of nonformal education. Nonformal education might provide status and income benefits to such adult participants without dramatic alterations in the occupational structure, because the clientele would not have to convince others of their competence in terms other than the products they produce. They can utilize new skills and knowledge acquired through nonformal education to enhance their living standards by increasing their income.

When nonformal education is designed to improve the occupational status and productivity of its clientele, it

should be accompanied by adequate measures like the creation of new markets, improved communication system and availability of credit systems and simple technology. These measures will make nonformal education more beneficial in terms of its effects upon productivity and self employment. However, these measures are entangled in the larger social issues such as opportunity structure, agrarian reform and world-wide pricing system. Availability of these supportive mechanisms and other institutions in the wider environment as La Belle and Verhine stress, are very important for the successful impact of nonformal education on the entrepreuners, small farmers and the young school leavers engaged in self-employment. However, these obstacles are not easy to overcome. Co-operative system as in the case of "Brigades of Botswana" might be a great help in overcoming some of these obstacles. In spite of the problems, nonformal education will continue to operate, providing significant socio-economic mobility for its clientele whenever the existing socio-economic system permits. An important aspect is that it will provide experiences leading to self-awareness, self management and will help in increasing their income. Such an awareness will enable them to stand up against the urban masses or the rural elites, which form the exploiting classes.

Since nonformal education can be more immediately problem oriented, it can be readily utilized to provide the knowledge and skills needed for the improvement of life of

people of community. More importantly nonformal education shows strong potential for getting at the human conditions of those most likely to be excluded from formal schools - the poor, the isolated, the rural, the illiterate and the unemployed and underemployed. If the governments of developing countries and the international agencies really believe that development goals must be wider; that priority must be given to rural development; that formal education is inappropriate to their needs and that nonformal education become widely acceptable; then, serious considerations must be given to the study of the broader socio-economic context within which education system operates and to the constraints which are imposed on educational reforms by this context. They should also explore the importance of socio-political constraints which make meaningful educational reform extremely difficult.

As long as the economic and social structure (of the colonial period) of the developing societies remain intact, large scale expansion of nonformal education will be frustrating. For the effectiveness and success of nonformal education and for it to be acceptable by the masses a change in the reward structure is neccesary. Alternatively there must be a complete realization of the need for fundamental or radical changes in the economic and social structures of these societies. Such reforms would obviously not be in the best interest of the dominant class hence, they are likely to resist them. Therefore, structural transformation is not

an easy task.

Keeping in view, all these limitations, each country must make its own decisions, choices of strategy, plans of action, its own educational models and learning from the experience of other developing countries, it must develop its own programme. Parallel to formal education, nonformal education programmes must be strengthened and new programmes must be provided to complement, supplement and be an alternative to formal schooling wherever it is needed. In this way, where formal eduation fails to solve the crisis, as a useful alternative, nonformal education which is able to involve the masses in their own development and the development of their own community, will offer solutions to the crisis, the Third World countries are now confronting with the educational programmes. Hopefully, in future, the merger of formal and nonformal education will evolve a reformed system of education relevant to the needs of people and the nation.

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